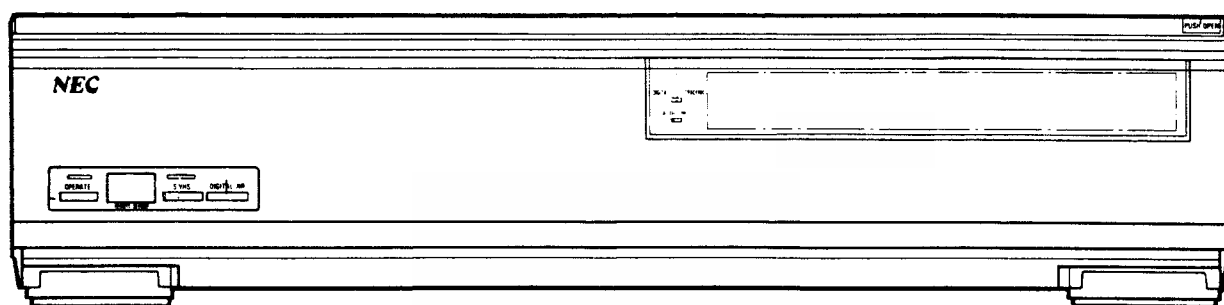


COLOR VIDEO CASSETTE RECORDER SERVICE MANUAL

PART NO. 549-91-0494



Better Service
Better Reputation
Better Profit



SPECIFICATIONS

Format	: 625 S-VHS/VHS PAL standard	S-VIDEO Input Luminance	(Y) : 1.0 Vp-p, 75 Ω unbalanced
Recording system	: Rotary, slant azimuth 4-head helical scanning system	Colour	(C) : 4.43 MHz burst, 0.286 Vp-p, 75 Ω unbalanced
Video signal system	: PAL colour and CCIR monochrome signal, 625 lines.	S-VIDEO Output Luminance	(Y) : 1.0 Vp-p, 75 Ω unbalanced
Tape width	: 12.65 mm (1/2 inch)	Colour	(C) : 4.43 MHz burst, 0.286 Vp-p, 75 Ω unbalanced
Tape speed	: SP: 23.39 mm/sec. LP: 11.70 mm/sec	Normal Audio	
Maximum recording time	: SP: 240 min. with E-240 video cassette LP: 480 min. with E-240 video cassette	Input	: -8 dBs, 47 k Ω unbalanced
Temperature operating storage	: 5°C to 40°C -20°C to 60°C	Output	: -8 dBs, high impedance load
Channel coverage	: VHF VL: 47 - 118 MHz VHF VH: 118 - 300 MHz UHF U : 470 - 862 MHz	S/N ratio	: More than 40 dB
Antenna output	: Channel 30 - 39, adjustable Channel 0 or 1 (switchable) 75 ohms, unbalanced	Frequency range	: 100 Hz to 10,000 Hz
Power consumption	: 55 Watts	Hi-Fi Audio (AFM)	
Power requirement	: AC 220V \sim 50 Hz	Input	: -18 dBs, 47 k Ω unbalanced
Video		Output	: -8 dBs, high impedance load
Input	: 0.5 to 2.0 Vp-p, 75 ohms unbalanced	Dynamic Range	: More than 90 dB
Output	: 1.0 \pm 0.1 Vp-p, 75 ohms unbalanced	Channel Separation	: More than 60 dB
S/N ratio	: More than 43 dB (Digital NR off) More than 49 dB (Digital NR on)	Frequency Response	: 20 Hz to 20 kHz
Horizontal resolution	: More than 400 lines (S-VHS)/240 lines (VHS) with the SHARPNESS control at center position.	Miscellaneous	
		Timer	: Maximum 1-year/4-event
		Backup time	: 24 hours
		Dimensions	: 430mm (W) \times 104mm (H) \times 382mm (D)
		Weight	: 9.6 kg
		Provided accessories	: Remote control unit Antenna cable Size AA batteries (2 pieces) Y-C separate connector cable (S-video cable) Audio cable

Design and specifications are subject to change without notice.

NEC Corporation

TOKYO, JAPAN

CONTENTS

SECTION 1

IMPORTANT SAFETY PRECAUTIONS	1-1
CONTROLS AND COMPONENTS	1-4

SECTION 2

DISASSEMBLY	2-1
1. REMOVING THE CASE	
1-1. TOP COVER (Figure 1-1)	2-1
1-2. BOTTOM COVER (Figure 1-2)	2-1
1-3. FRONT PANEL (Figure 1-3)	2-1
2. CIRCUIT BOARD LOCATIONS	
2-1. TOP VIEW	2-2
2-2. BOTTOM VIEW	2-2
3. REMOVING THE CIRCUIT BOARDS	
3-1. SUB FUNCTION CIRCUIT BOARD (Figure 3-1)	2-3
3-2. TIMER/FUNCTION CIRCUIT BOARD (Figure 3-2)	2-3
3-3. PREAMP CIRCUIT BOARD (Figure 3-3)	2-3
3-4. POWER/REGULATOR CIRCUIT BOARD (Figure 3-4)	2-4
3-5. DIGITAL CIRCUIT BOARD (Figure 3-5)	2-4
3-6. VIDEO CIRCUIT BOARD (Figure 3-6)	2-4
3-7. DECODER CIRCUIT BOARD (Figure 3-7)	2-5
3-8. TUNER/IF CIRCUIT BOARD (Figure 3-8)	2-5
3-9. AUDIO (1) CIRCUIT BOARD (Figure 3-9)	2-5
3-10. H.P/VIDEO SW CIRCUIT BOARD (Figure 3-10)	2-6
3-11. JACK TERMINAL CIRCUIT BOARD (Figure 3-11)	2-6
3-12. SYSCON/SERVO CIRCUIT BOARD (Figure 3-12)	2-6
4. REMOVING THE CASSETTE MECHANISM	
4-1. REMOVING THE CASSETTE HOUSING ASSEMBLY (Figure 4-1)	2-7
4-2. FRONT COVER (Figure 4-2)	2-7
4-3. M.SWITCH ASSEMBLY (Figure 4-3)	2-7
4-4. END SENSOR CIRCUIT BOARD (Figure 4-4)	2-8
4-5. MECHA JUNCTION CIRCUIT BOARD (Figure 4-5)	2-9

SECTION 3

ADJUSTMENT	3-1
1. MECHANICAL ADJUSTMENT	3-1
1-1. SERVICING JIGS AND TOOLS	3-1
1-2. MECHANISM ASSEMBLY	3-2
1-3. BEFORE DISASSEMBLING PARTS ON THE CHASSIS (Figure 1-3)	3-4
1-4. BEFORE ADJUSTING THE MECHANISM (Figure 1-4)	3-5
1-5. SERVICING PRECAUTIONS (Figure 1-5)	3-5
1-6. REPLACEMENT OF GROUND PLATE ASSEMBLY (Figure 1-6)	3-5
1-7. REPLACEMENT OF ROTARY DRUM ASSEMBLY (Figure 1-7-1, 1-7-2)	3-6
1-8. REPLACEMENT OF DRUM ASSEMBLY (Figure 1-8-1)	3-8
1-9. REPLACEMENT OF S-SLANT BASE ASSEMBLY AND T-SLANT BASE ASSEMBLY (Figure 1-9)	3-9
1-10. REPLACEMENT OF IP ROLLER (Figure 1-10)	3-9
1-11. REPLACEMENT OF FE HEAD (Figure 1-10)	3-9

1-12. REPLACEMENT OF AUDIO/CONTROL HEAD (Figure 1-12)	3-10
1-13. REPLACEMENT OF SECTOR GEAR (Figure 1-13)	3-11
1-14. REPLACEMENT OF LOADING CAM (Figure 1-14)	3-12
1-15. REPLACEMENT OF PINCH ROLLER ASSEMBLY (Figure 1-15)	3-12
1-16. REPLACEMENT OF CAPSTAN MOTOR (Figure 1-16)	3-13
1-17. REPLACEMENT OF MAIN CAM ASSEMBLY (Figure 1-17)	3-14
1-18. REPLACEMENT OF SOL LINK LEVER (Figure 1-18-1)	3-14
1-19. REPLACEMENT OF BRAKE SOL ASSEMBLY (Figure 1-18)	3-15
1-20. REPLACEMENT OF T MAIN BRAKE ASSEMBLY AND S MAIN BRAKE ASSEMBLY (Figure 1-20)	3-15
1-21. REPLACEMENT OF SUB-CHASSIS ASSEMBLY (Figure 1-21)	3-16
1-22. REPLACEMENT OF TENSION REGULATION BAND ASSEMBLY (Figure 1-22)	3-16
1-23. TENSION REGULATION ARM POSITION ADJUSTMENT (Figure 1-23)	3-16
1-24. REPLACEMENT OF TENSION REGULATION ARM ASSEMBLY (Figure 1-24)	3-17
1-25. REPLACEMENT OF S REEL TABLE ASSEMBLY (Figure 1-25)	3-18
1-26. REPLACEMENT OF T REEL TABLE ASSEMBLY (Figure 1-26)	3-18
1-27. S AND T REEL TABLE ASSEMBLY ADJUSTMENTS (Figure 1-27)	3-19
1-28. MEASUREMENT AND CONFIRMATION OF FWD WINDING TORQUE (Figure 1-28)	3-19
1-29. MEASUREMENT AND CONFIRMATION OF BRAKE TORQUE (Figures 1-28, 1-29)	3-19
2. CHECKING AND ADJUSTING TAPE PATH	3-20
2-1. TAPE PATH MECHANISM (Figure 2-1)	3-20
2-2. TAPE RUNNING PATH CHECK	3-21
2-3. TAPE TRANSPORT SYSTEM ADJUSTMENT	3-22
3. INTERCOMPATIBILITY ADJUSTMENTS	3-23
3-1. FM WAVEFORM CHECK	3-24
3-2. FM WAVEFORM COARSE ADJUSTMENT ...	3-25
3-3. FINE ADJUSTMENT FOR INTER- CHANGEABILITY	3-26
3-4. ACE HEAD HEIGHT AND AZIMUTH ADJUSTMENT	3-26
3-5. CTL POSITION ADJUSTMENT	3-26
3-6. FINAL CHECK	3-27
4. ELECTRICAL ADJUSTMENTS	3-28
4-1. PREPARATION	3-28
4-2. SERVO CIRCUIT (S/S board)	3-29
4-3. AUDIO CIRCUIT [Normal] (Audio board)	3-32
4-4. AUDIO CIRCUIT [Hi-Fi audio] (Audio board) .	3-33
4-5. TUNER IF CIRCUIT	3-34
4-6. DECODER CIRCUIT (Decoder board)	3-36
4-7. VIDEO CIRCUIT (Video board)	3-37
4-8. DIGITAL CIRCUIT (DIGITAL board)	3-46

SECTION 4

BLOCK AND SCHEMATIC DIAGRAM	4-1
1. GENERAL BLOCK DIAGRAM	4-1
2. SCHEMATIC/CIRCUIT BOARD DIAGRAMS	4-3
2-1. FRAME WIRING	4-3
2-2. SYSTEM CONTROL SCHEMATIC DIAGRAM	4-5
2-3. SERVO SCHEMATIC DIAGRAM	4-7
2-4. SERVO (AUTO TRACKING) SCHEMATIC DIAGRAM	4-9
2-5. VPS DECODER SCHEMATIC DIAGRAM	4-11
2-6. SYSTEM CONTROL/SERVO/VPS CIRCUIT BOARD (SOLDER SIDE)	4-13
2-7. VIDEO SCHEMATIC DIAGRAM	4-15
2-8. VIDEO CIRCUIT BOARD (SOLDER SIDE)	4-23
2-9. PRE AMP SCHEMATIC DIAGRAM	4-25
2-10. PRE AMP CIRCUIT BOARD (SOLDER SIDE)	4-27
2-11. FLYING ERASE SCHEMATIC DIAGRAM	4-28
2-12. FLYING ERASE CIRCUIT BOARD	4-28
2-13. AUDIO SCHEMATIC DIAGRAM	4-29
2-14. AUDIO CIRCUIT BOARD (SOLDER SIDE) ...	4-32
2-15. HEADPHONE SCHEMATIC DIAGRAM	4-33
2-16. VIDEO OUTPUT SW SCHEMATIC DIAGRAM	4-34
2-17. H.P/VIDEO SW CIRCUIT BOARD (SOLDER SIDE)	4-35
2-18. TIMER FUNCTION/SUB FUNCTION SCHEMATIC DIAGRAM	4-37
2-19. TIMER FUNCTION/SUB FUNCTION CIRCUIT BOARD (SOLDER SIDE)	4-40
2-20. TUNER/IF SCHEMATIC DIAGRAM	4-41
2-21. TUNER/IF CIRCUIT BOARD (SOLDER SIDE)	4-43
2-22. DIGITAL SCHEMATIC DIAGRAM	4-45
2-23. DIGITAL CIRCUIT BOARD (SOLDER SIDE)	4-48
2-24. DECODER SCHEMATIC DIAGRAM	4-49
2-25. DECODER CIRCUIT BOARD (SOLDER SIDE)	4-52
2-26. POWER/REGULATOR SCHEMATIC DIAGRAM	4-53
2-27. POWER/REGULATOR CIRCUIT BOARD (SOLDER SIDE)	4-55
2-28. JACK TERMINAL SCHEMATIC DIAGRAM ...	4-57
2-29. JACK TERMINAL CIRCUIT BOARD (SOLDER SIDE)	4-57

SECTION 5

EXPLODED VIEW	5-1
5-1. CABINET SECTION	5-1
5-2. CHASSIS SECTION	5-2
5-3. MECHANISM (I) SECTION	5-3
5-4. MECHANISM (II) SECTION	5-4
5-5. MECHANISM (III) SECTION	5-5
5-6. CASSETTE HOUSING SECTION	5-6

SECTION 6

REPLACEMENT PARTS LIST	6-1
-------------------------------------	-----

SECTION 1

IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, the products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

● Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the \triangle symbol and shaded () parts are critical for safety. Replace only with specified part numbers.

Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

3. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers
 - 4) Insulation sheets for transistors
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering. (Fig. 1)
6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. When a power cord has been replaced, check that 10 - 15 kg of force in any direction will not loosen it. (Fig. 2)
9. Also check areas surrounding repaired locations.

10. Products using cathode ray tubes (CRTs)
In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the parts specified. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

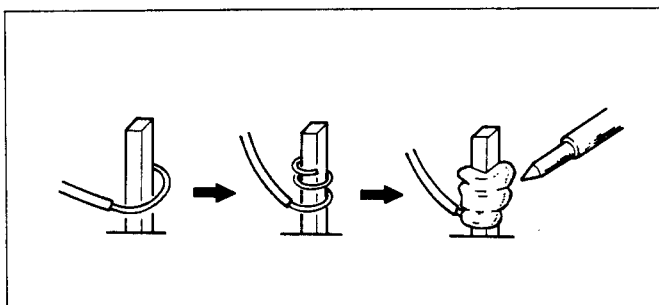


Fig. 1

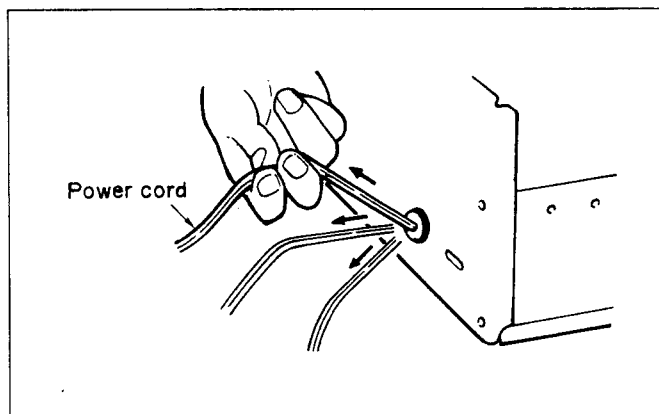


Fig. 2

● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Insulation resistance test

Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table below.

2. Dielectric strength test

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) See table below.

3. Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table below.

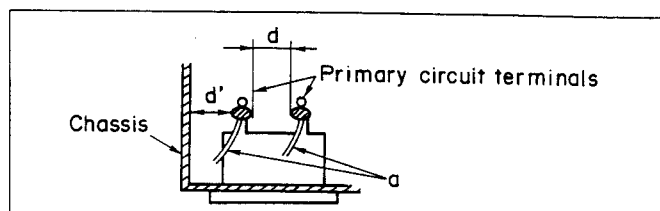


Fig. 3

Table 1: Ratings for selected areas

AC Line Voltage	Region	Insulation Resistance	Dielectric Strength	Clearance Distance (d), (d')
100V	Japan	$\geq 1 \text{ M}\Omega/500\text{V DC}$	1 kV 1 minute	$\geq 3 \text{ mm}$
110 to 130V	U.S.A. & Canada	—	900V 1 minute	$\geq 3.2 \text{ mm}$
*110 to 130V 200 to 240V	Europe Australia	$\geq 10 \text{ M}\Omega/500\text{V DC}$	4 kV 1 minute	$\geq 6 \text{ mm (d)}$ $\geq 8 \text{ mm (d')}$ (a Power cord)

* Class II model only.

Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

4. Leakage current test

Confirm specified or lower leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method: (Power ON)

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure and following table.

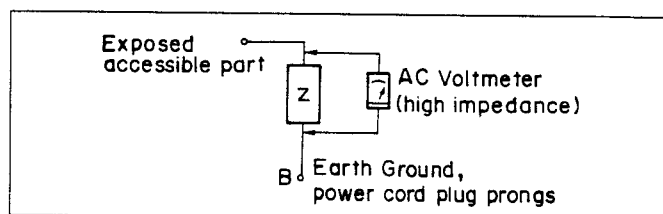


Fig. 4

Table 2: Leakage current ratings for selected areas

AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to:
100V	Japan		$i \leq 1\text{mA rms}$	Exposed accessible parts
110 to 130V	U.S.A. & Canada		$i \leq 0.5\text{mA rms}$	Exposed accessible parts
110 to 130V 200 to 240V	Europe Australia		$i \leq 0.7\text{mA peak}$ $i = 2\text{mA dc}$	Antenna earth terminals
			$i \leq 0.7\text{mA peak}$ $i = 2\text{mA dc}$	Other terminals

Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

WARNING

1. This set is for exclusive use with the PAL colour system (system B and G).
2. SECAM (system B and G) colour programmes might be recorded in certain areas but there is no interchangeability of these recorded cassette tapes with other PAL-VHS recorders or SECAM-VHS recorders.
3. Please use the exclusive SECAM-VHS recorder in SECAM broadcasting areas.
4. Please use only PAL prerecorded cassette tapes or PAL signals which have been recorded with the PAL-VHS system.
5. For camera recording, connect a video camera built to the PAL standard.

IMPORTANT: It is permissible to record television programs only in the event that third party copyrights and other rights are not violated.

WARNING:
**TO PREVENT FIRE OR
SHOCK HAZARD, DO NOT
EXPOSE THIS UNIT TO RAIN
OR MOISTURE.**

CAUTION

Dangerous voltage inside. Refer internal servicing to qualified service personnel. To prevent electric shock or fire hazard, remove the power cord from the AC outlet prior to connecting or disconnecting any signal lead or aerial.

Even if VCR OPERATE button is in "OFF" position, parts of the unit are still connected to the mains.

NOTE: The rating plate and the safety caution are on the rear of the unit.

CAUTION: When you are not using the VCR for a long period of time, it is recommended that you disconnect the power cord from AC outlet.

This instruction manual is important to you. Please read it. In a brief, concise manner, it shows exactly how to connect, operate and adjust the VCR for best performance. It can save you money. It shows you simple things to do and check before you call for help...So you may save the cost of unnecessary service.



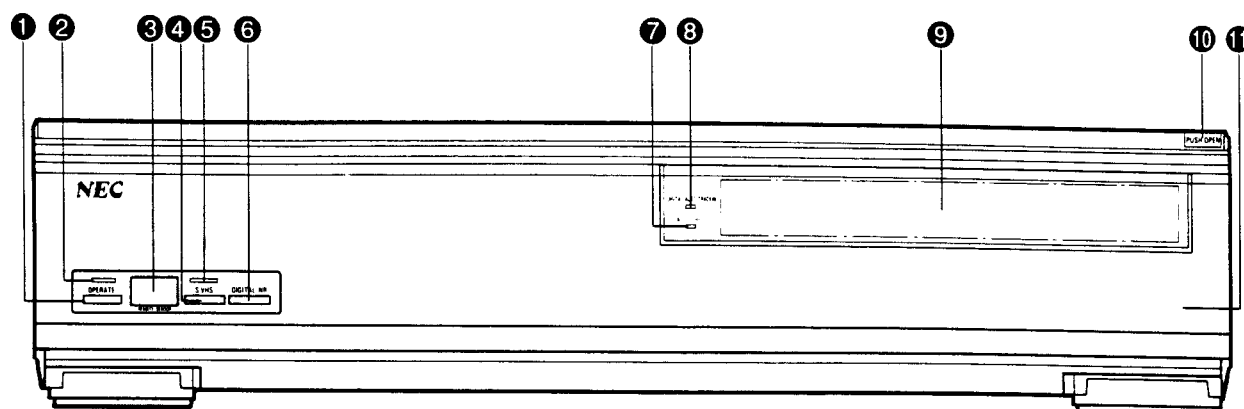
Only cassettes marked "VHS" can be used with this video cassette recorder.

VHS High Quality technology is incorporated into VCR's marked "HQ". This unit is compatible with conventional VHS VCR's.

NOTE: The pages (1-3 to 1-6) in this Service Manual were used from the Owner's Manual without any modification.

CONTROLS AND COMPONENTS

FRONT VIEW



① OPERATE Button

This Button is used to turn the VCR on and off.

② OPERATE Indicator

This indicator lights when the unit's power is on.

③ Remote Sensor

This sensor receives signals from the remote control.

④ S-VHS Button

This Button is used to select the S-VHS mode for recording on an S-VHS video cassette.

⑤ S-VHS Indicator

The S-VHS indicator lights when the VCR is in the S-VHS mode.

⑥ DIGITAL NR (Noise Reduction) Button

Press this Button to activate the Digital noise reduction circuit to reduce video noise.

⑦ AUDIO REC Indicator

This Indicator lights when Audio Dubbing is being performed.

⑧ DIGITAL AUTO TRACKING Indicator

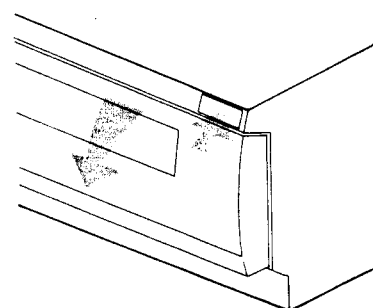
This indicator lights when AUTO TRACKING is on.

⑨ DISPLAY

Refer to page 12.

⑩ PUSH OPEN Button

This Button is used to open the Front compartment.

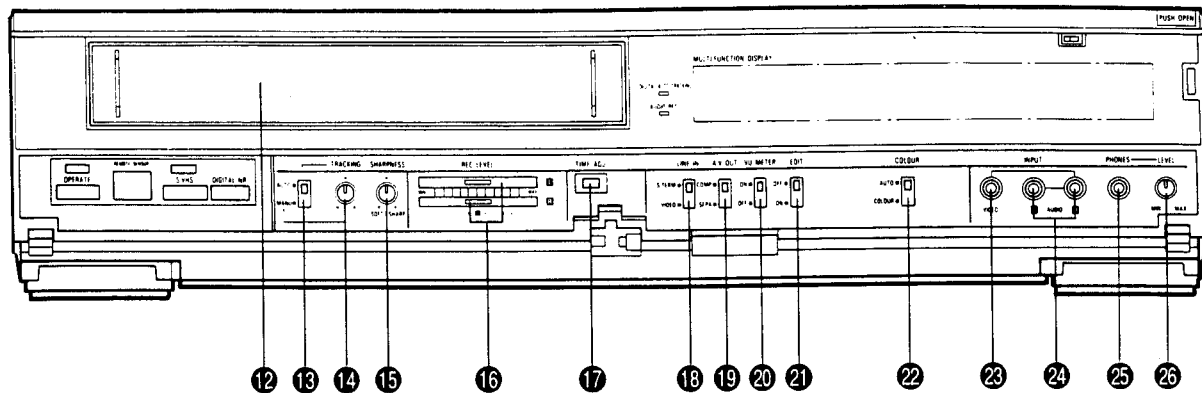


⑪ Front Compartment

Refer to the next page.

CONTROLS AND COMPONENTS (Cont'd)

FRONT COMPARTMENT



12 Cassette Compartment

13 TRACKING Select Switch

This switch is used to select between automatic or manual tracking. Tracking is adjusted automatically when this switch is set to the "AUTO" position.

14 TRACKING Control

This control is used to fine tune the picture during playback to eliminate or reduce noise bars when the TRACKING Select Switch is set to "MANU".

15 SHARPNESS Control

Turn this control to the left to soften the picture, and to the right to sharpen it.

16 REC LEVEL Control

The recording level of Hi-Fi audio signals should be manually adjusted. For adjustment, slide the REC LEVEL controls while referring to the level meters.

17 TIME ADJ. Button

This Button is used for Clock Setting. Refer to page 17.

18 LINE IN Select Switch

This switch is used to select the input terminal when recording from an external source. Set the INPUT select Button to LINE, then select the input terminal with the LINE IN Select Switch.

S-TERM : This position is used when recording signals from equipment connected to the S-VIDEO IN terminal. The audio signals are received through the Front or Rear AUDIO IN terminals.

VIDEO : This position is used when recording signals from equipment connected to the Front or Rear VIDEO IN terminal.

19 A/V OUT Switch

This switch is used when selecting between the composite video signal or the separate video signal from the 21 pin scart connector.

You will have a clearer picture when you select the "SEPA" position if you use a TV where the separate video input is possible from the 21 pin scart connector.

20 VU METER Select Switch

ON : The meters show the audio levels for the left and right channels.

OFF : The meters are off.

21 EDIT Switch

ON : Used when dubbing from one VCR to another using the video and audio line input and output terminals on the VCR.

OFF : Normally set to this position.

22 AUTO/COLOR Select Switch

AUTO : Color or B/W mode is automatically selected. Set to this position for normal use.

COLOR : Set to this position when the input or playback video signal is in color.

23 FRONT VIDEO IN Terminal

For connection of another VCR, a portable video camera, or other video output to this VCR.

This terminal has priority over the rear VIDEO IN terminal.

24 FRONT AUDIO IN Terminals

For connection of a stereo system, tuner, portable video camera, external sound equipment, or another VCR to this VCR. This terminal has priority over the rear AUDIO IN terminals.

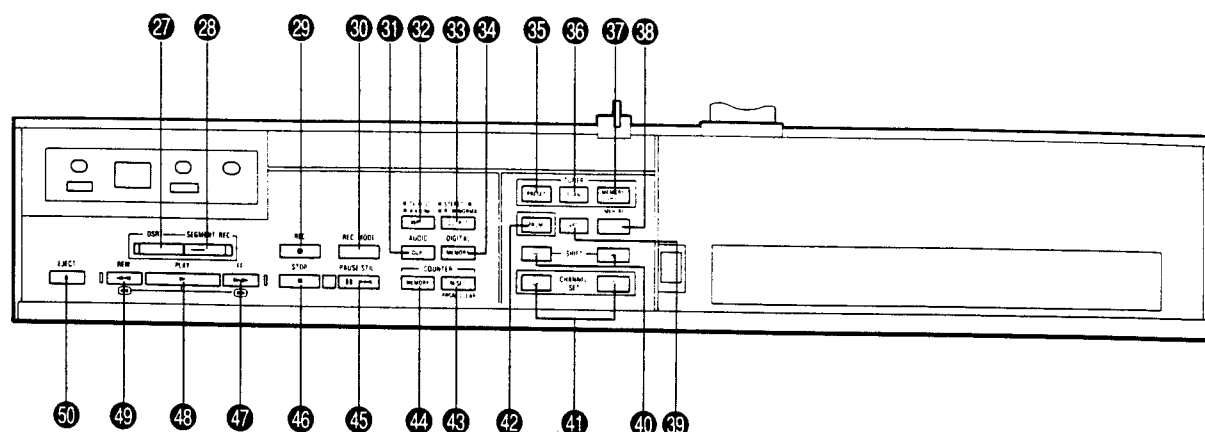
25 PHONES Jack

Connect stereo headphones to this jack to monitor audio.

26 PHONES LEVEL Control

The headphone volume is adjusted using this control.

CONTROLS AND COMPONENTS (Cont'd)



27 DSR Button

Use this Button to set the timer for the VCR to begin recording automatically when using the Segment Record feature.

The start time can be delayed up to 24 hours. Refer to page 39.

28 SEGMENT REC Button

This Button is used to initiate the Segment Recording function and set the recording length. Refer to page 39.

29 REC Button

This Button is used to begin recording.

30 REC MODE Select Button

This Button is used to select the recording speed, the recording speed selected is indicated in the display. It is only necessary to select the tape speed when recording; the correct playback speed is automatically selected.

31 AUDIO DUB Button

This Button is used to dub a new audio programme on to the normal audio track. Refer to page 45.

32 INPUT Select Button

The input changes in the following order with each press of this Button: TV → SC → A/V (LINE)

TV : To record signals coming from the built-in tuner.

SC (SIMULCAST): To record the video signal from the built-in tuner and the audio signal from the REAR (RCA) AUDIO IN terminals. When recording FM simulcast TV programs, use this position. (SC appears in the display.)

A/V (LINE) : To record signals coming from equipment connected to the Front or Rear VIDEO and AUDIO IN terminals. (AV appears in the channel indicator position in the display.)

33 OUTPUT Select Button

For selecting the audio output signals from the AUDIO OUT Terminals (L and R), PHONES jack, and RF OUT terminal.

Each time this Button is pressed, the output changes in this order: Stereo → Left → Right → Normal. The output mode currently selected can be checked by referring to the Level Meters.

SELECTOR POSITION	AUDIO OUT TERMINAL		HEADPHONES		RF OUT	L & R Indicators
	L	R	L	R		
STEREO	L	R	L	R	L + R	L & R
L	L	L	L	L	L	L
R	R	R	R	R	R	R

When this Button is set to the NORMAL position, monaural sound is heard from both the left and right channels. (The L and R Indicators are off.)

34 DIGITAL MEMORY Button

When pressed during playback, a Stop Action picture is displayed, while the tape continues to run in real time. When pressed while monitoring a TV program through the VCR's built-in tuner, a still picture is displayed while the TV program continues live.

35 PRESET Button

This Button is used to set the VCR to the Channel Presetting mode.

36 SCAN Button


This Button is used for Channel Presetting. The channel tuning moves to a higher channel by pressing this Button.

37 MEMORY/SHIFT Button

This Button is used for Channel Presetting. This Button is pressed to enter a tuned channel into memory.

CONTROLS AND COMPONENTS (Cont'd)

38 **TIMER REC Button**

This Button is used to set the VCR for automatic Timer Recording. When this Button is pressed, the Timer Recording Indicator  lights in the display. While this indicator is on, the unit is under the control of the timer and cannot be operated manually.

39 **VPS Button**

This button is used to switch the VPS mode on and off.

40 **SHIFT (—)/(+) Buttons**

These Buttons are used for Time and Date Setting and Timer Programming.

41 **CHANNEL/SET (V)/(^) Buttons**

Used to select the specific channel which you wish to view or record. Also used during Time and Date Setting and Timer Programming.

42 **PRGM (Program) Button**

This Button sets the VCR to the Timer Programming mode.

43 **COUNTER RESET/PROGRAM CLEAR Button**

Pressing this Button during normal operation resets the tape counter to 0H00M00S.

Pressing this Button during timer programming clears the Timer information for the Programme being displayed.

44 **COUNTER MEMORY Button**

This Button is used to automatically stop the tape at 0H00M00S during rewind or fast forward.

45 **PAUSE/STILL Button**

This Button is used to stop tape movement during recording, or to stop the tape and display a Still picture during playback.

46 **STOP Button**

This Button is used to stop the tape.

47 **FF (Fast Forward/Cue) Button**

This Button is used to:

- A) move the tape forward rapidly.
- B) search the picture during playback.

48 **PLAY Button**

This Button is used to begin playback.

49 **REW (Rewind/Review) Button**

This Button is used to:

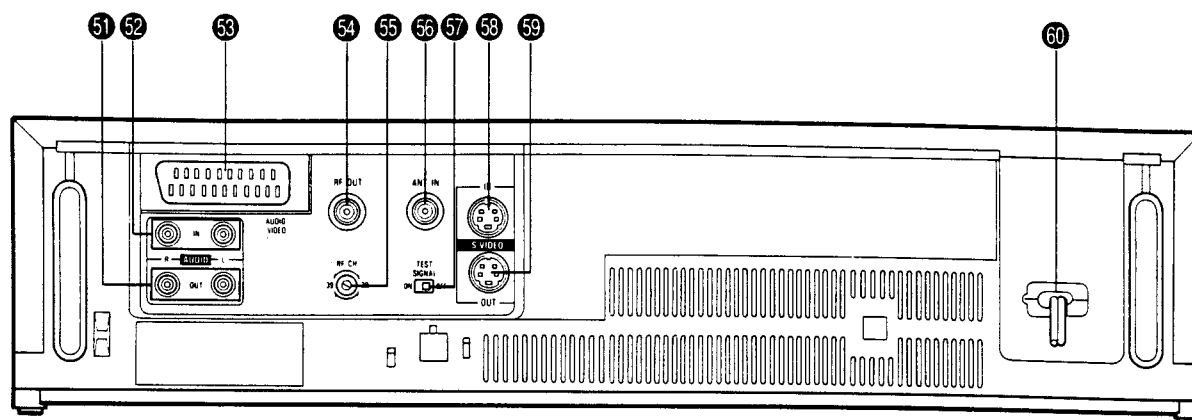
- A) rewind the tape rapidly.
- B) search the picture during playback.

50 **EJECT Button**

This Button is used to remove the cassette.

CONTROLS AND COMPONENTS (Cont'd)

REAR VIEW



51 REAR AUDIO OUT Terminals

For audio connection of this VCR to a stereo system, monitor, or another VCR.

52 REAR AUDIO IN Terminals

For connection of a stereo system, tuner, portable video camera, external sound equipment or another VCR to this VCR. For this purpose, the INPUT Select Button should be placed in the "A/V" position.

53 21-Pin SCART connector (Audio/Video connector)

This is a 21-Pin SCART connector for connection to a stereo TV equipped with the same type of connector.

54 RF OUT Connector

Connector to the antenna terminal of a TV with the antenna cable (provided).

55 RF CHANNEL Select Switch

This screw is used to select the TV signal transmitted from the RF OUT connector. Set this screw to the vacant channel (30 – 39), which is not used for TV broadcasting.

56 ANT IN Terminal

This terminal is used to connect a TV antenna or cable TV cable to the VCR.

57 TEST SIGNAL Switch

Normally, set this switch to the OFF position. This switch is used when tuning your TV to the VIDEO CHANNEL.

58 S-VIDEO IN Terminal

This terminal is used to connect a television or VCR which has an S-VIDEO OUT terminal to this VCR.

59 S-VIDEO OUT Terminal

This terminal is used to connect the VCR to a television or VCR which has an S-VIDEO IN terminal.

60 Power Cord

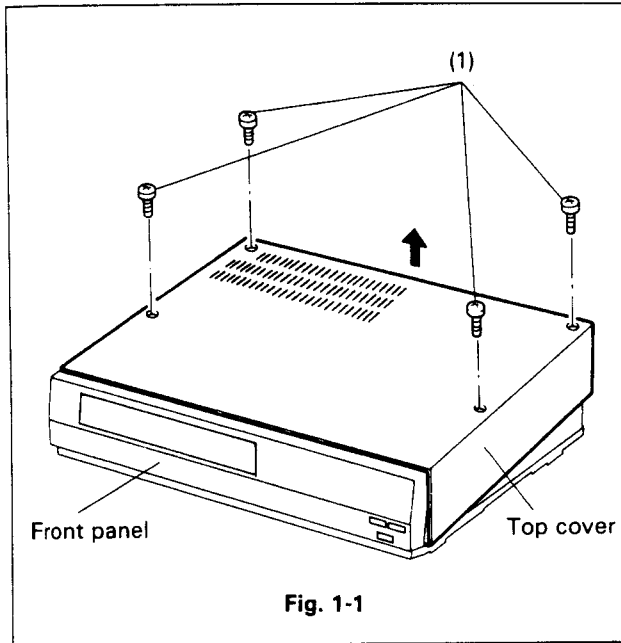
Connect to an AC 220V, 50 Hz outlet.

SECTION 2 DISASSEMBLY

1. REMOVING THE CASE

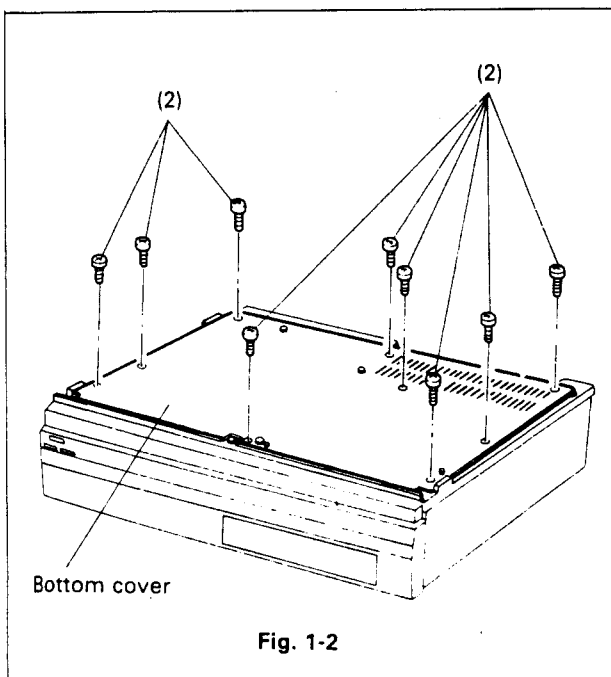
1-1. TOP COVER (Figure 1-1)

- (1) Remove screws (1) on the top cover.
- (2) Lift the rear of the top cover to release it in the direction of the arrow from the front panel.



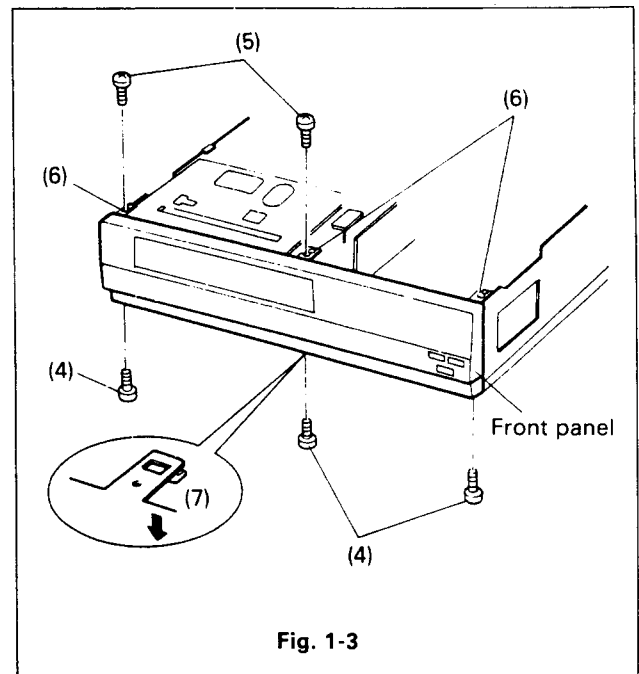
1-2. BOTTOM COVER (Figure 1-2)

- (1) Remove screws (2) on the bottom cover.



1-3. FRONT PANEL (Figure 1-3)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the bottom cover. (Refer to Item 1-2.)
- (3) Remove screws (4) on the bottom of the front panel.
- (4) Remove screws (5) on the top of the front panel.
- (5) Release tabs (6).
- (6) Release three tabs (7), and tilt the front panel forward to remove.

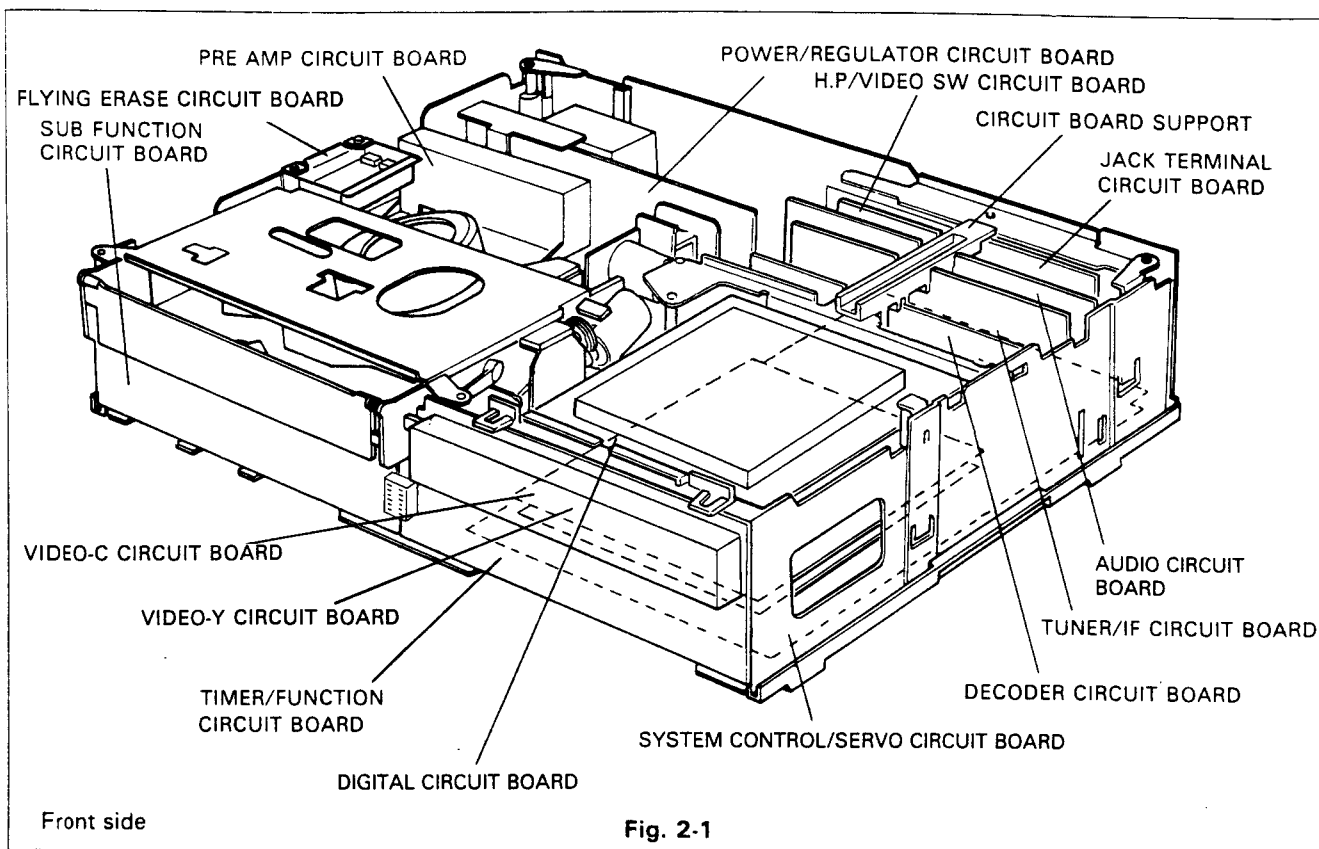


Note: When removing the front panel, take care not to break the flat cables from the front panel main unit.

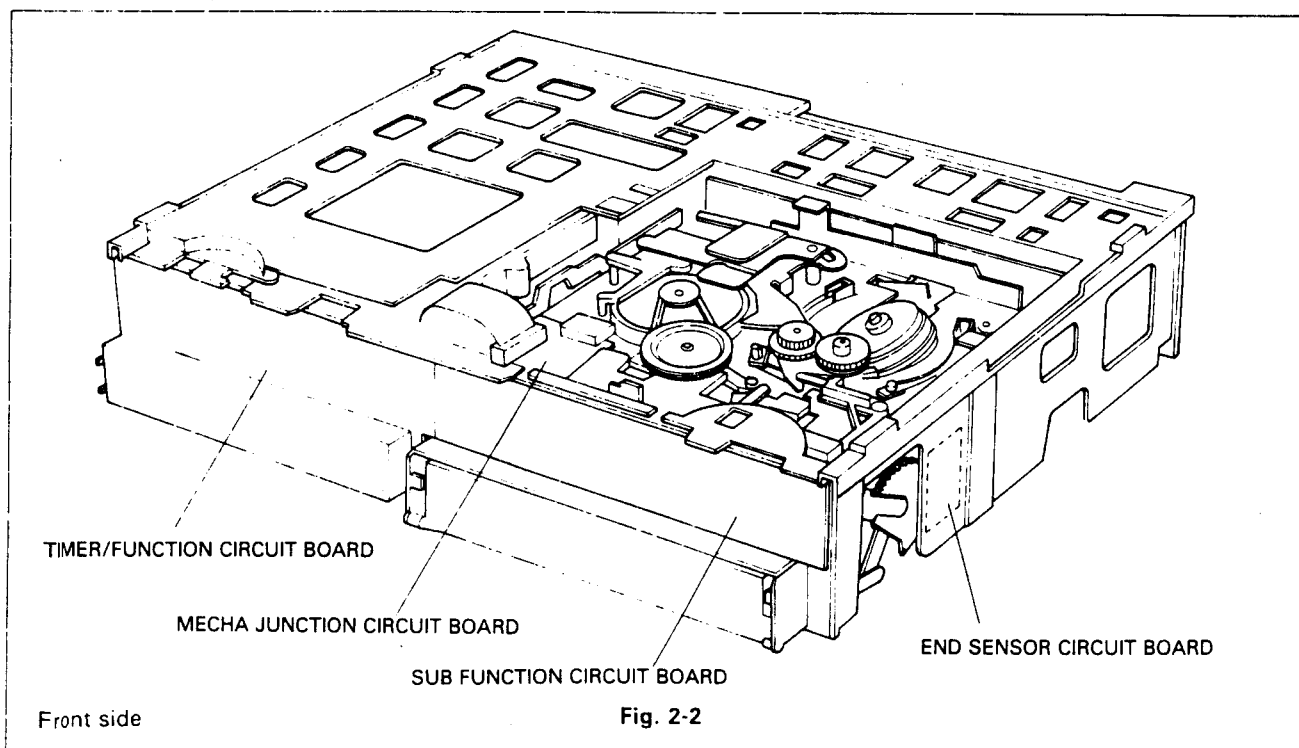
After releasing tabs (7), be sure to handle the tab set very carefully; Otherwise, the released tabs may return to their original locked positions.

2. CIRCUIT BOARD LOCATIONS

2-1. TOP VIEW



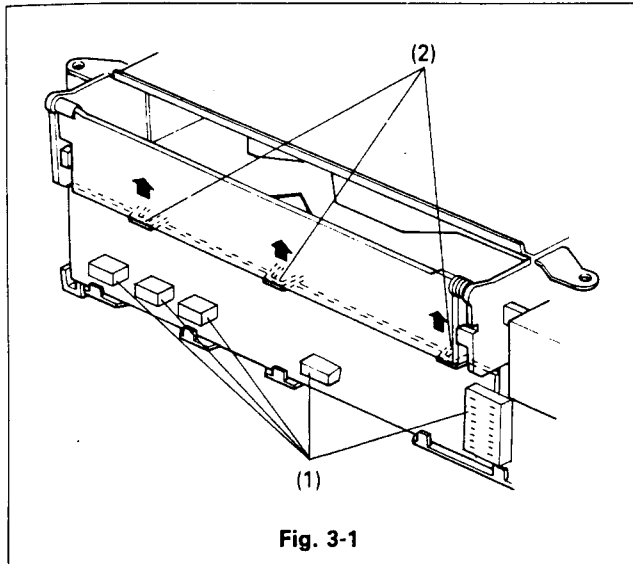
2-2. BOTTOM VIEW



3. REMOVING THE CIRCUIT BOARDS

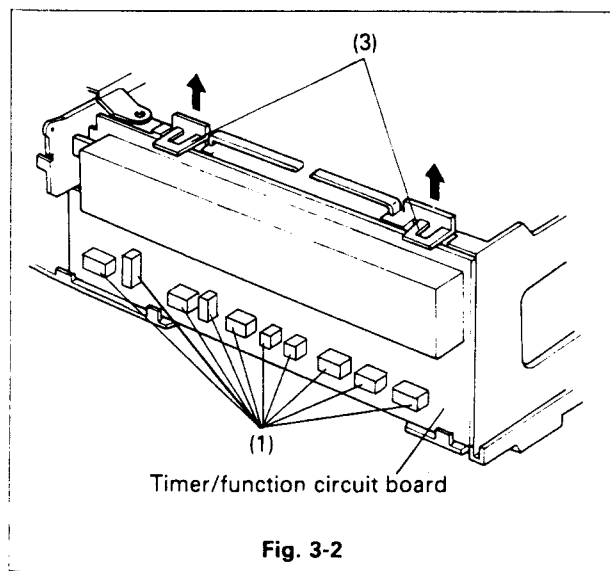
3-1 SUB FUNCTION CIRCUIT BOARD (Figure 3-1)

- (1) Remove the top cover, bottom cover, front panel. (Refer to Items 1-1, 1-2 and 1-3).
- (2) Remove two wire connectors (1) from the sub function circuit board.
- (3) Release three tabs (2) on the top of the circuit board and lift the circuit board to remove.



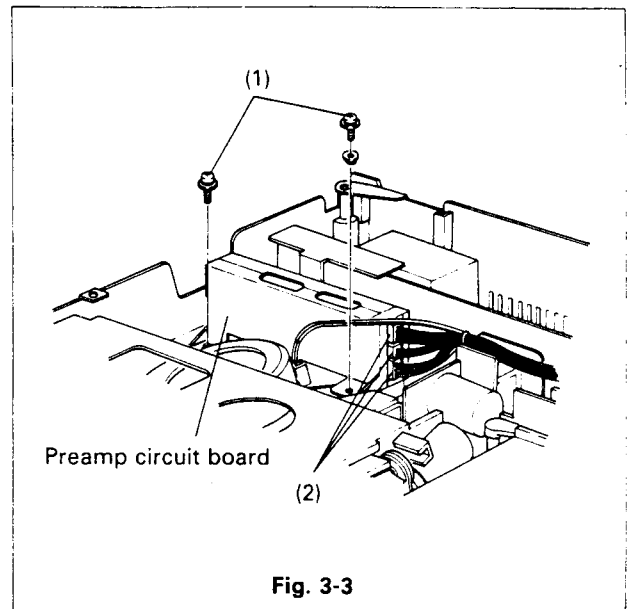
3-2. TIMER/FUNCTION CIRCUIT BOARD (Figure 3-2)

- (1) Remove the top cover, bottom cover and front panel. (Refer to Items 1-1, 1-2 and 1-3.)
- (2) Disconnect wire connectors (1) from the circuit board.
- (3) Release tabs (2), and lift the circuit board to remove.



3-3. PREAMP CIRCUIT BOARD (Figure 3-3)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove screws (1).
- (3) Disconnect wire connectors (2) from the circuit board.



Note: Be very careful not to damage the drum head circuit board when removing the preamp circuit board.

3-4. POWER/REGULATOR CIRCUIT BOARD (Figure 3-4)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the bottom cover. (Refer to Item 1-2.)
- (3) Remove the fuse cover.
- (4) Disconnect wire connectors (1) from the circuit board.
- (5) Disconnect wire connectors (2) from the S/S circuit board.
- (6) Remove screws (3).
- (7) Lift the power/regulator unit together with the AC outlet plate to remove.
- (8) Remove screws (4) to release the power/regulator circuit board from the base.

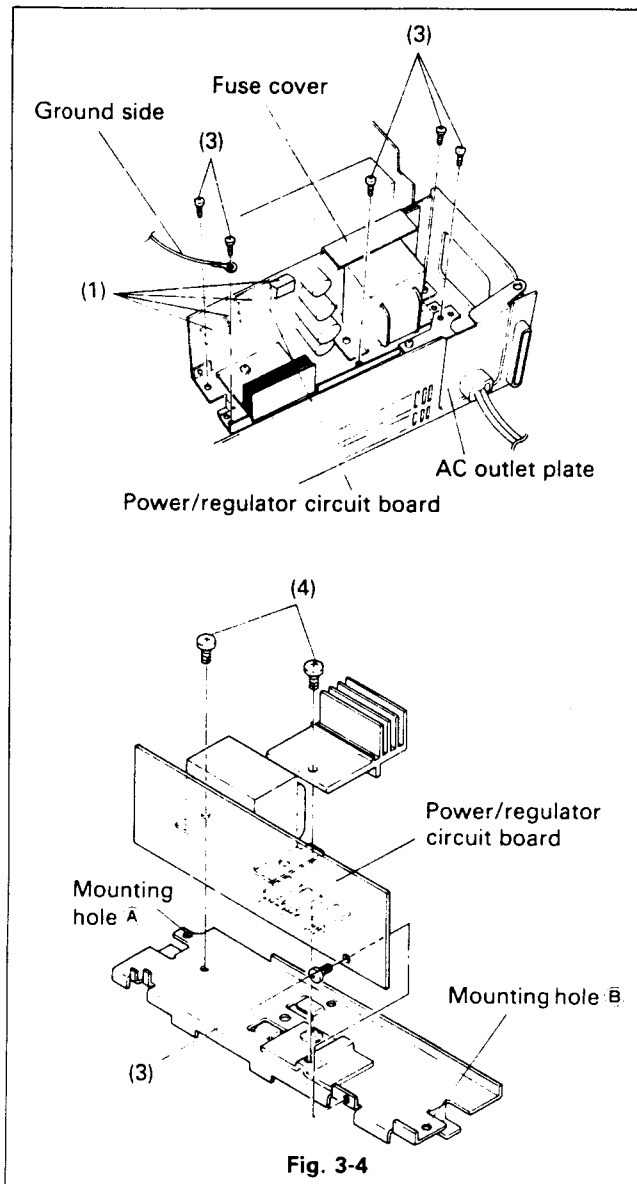


Fig. 3-4

Note: To install the power/regulator unit, align the mounting pins with mounting holes A and B.

3-5. DIGITAL CIRCUIT BOARD (Figure 3-5)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove screws (1).
- (3) Disconnect the connectors (2) from the digital circuit board.

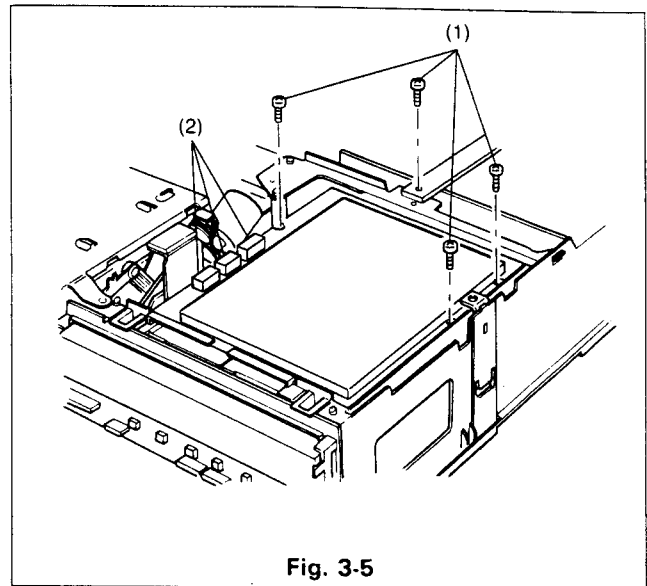


Fig. 3-5

3-6. VIDEO CIRCUIT BOARD (Figure 3-6)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the digital circuit board. (Refer to Item 3-5.)
- (3) Remove the wire connectors (1) from the digital circuit board.
- (4) Release tabs (2), and remove the circuit board.

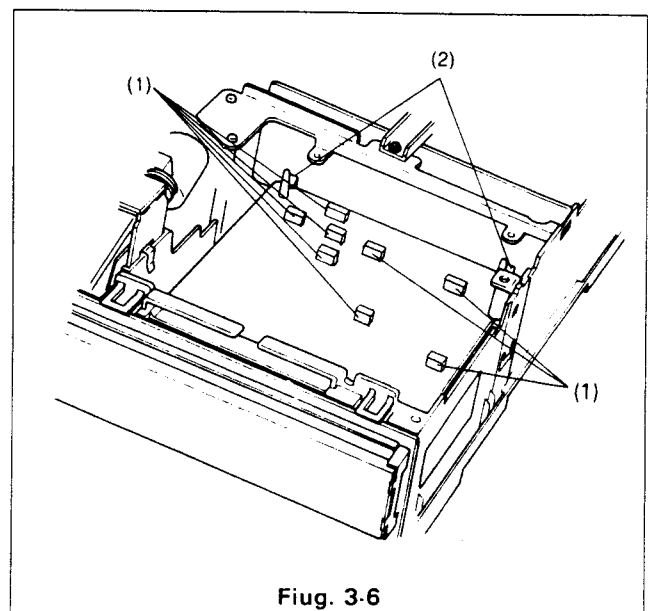
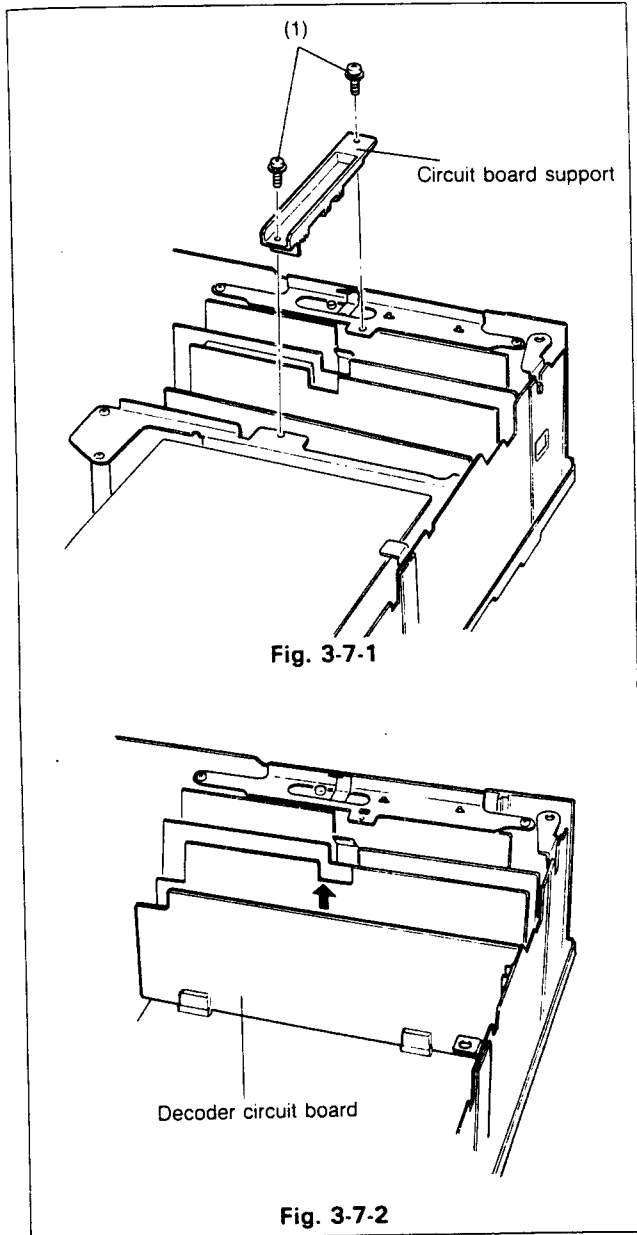


Fig. 3-6

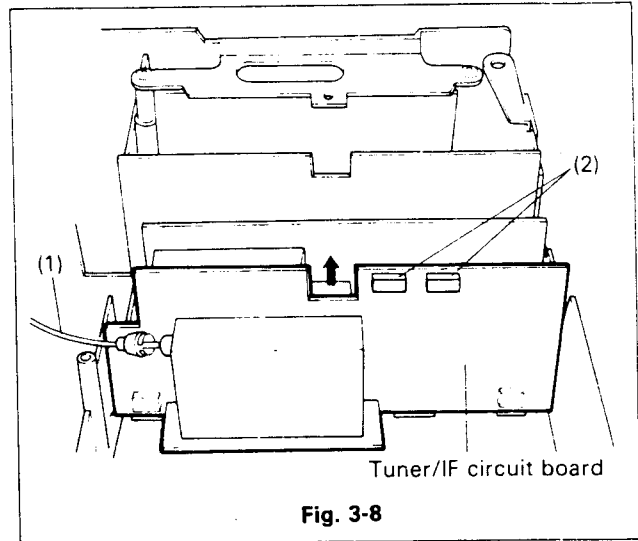
3-7. DECODER CIRCUIT BOARD (Figure 3-7)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove screws (1), and remove the circuit board support. (Figure 3-7-1.)
- (3) Lift up the decoder circuit board vertically to remove. (Figure 3-7-2.)



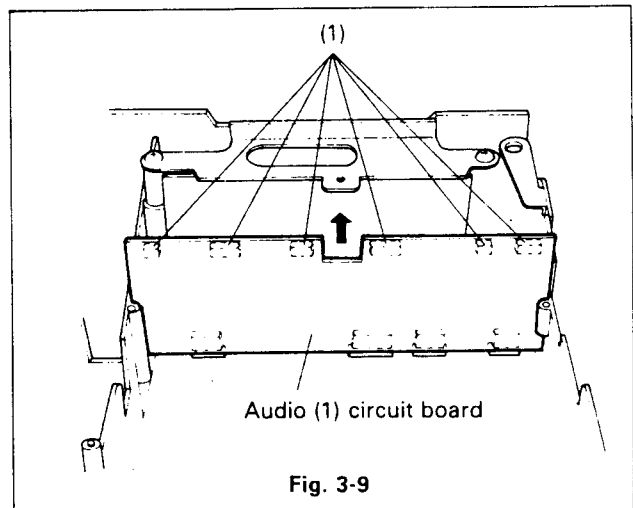
3-8. TUNER/IF CIRCUIT BOARD (Figure 3-8)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Remove the cable (1).
- (4) Disconnect the wire connector (2) from the circuit board.
- (5) Remove the tuner/IF circuit board by pulling it up vertically.



3-9. AUDIO (1) CIRCUIT BOARD (Figure 3-9)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Disconnect wire connectors (1) from the circuit board.
- (4) Lift up the audio (1) circuit board vertically to remove.



3-10. H-P/VIDEO CIRCUIT BOARD (Figure 3-10)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Disconnect the wire connector (1) from the circuit board.
- (4) Lift up the audio (2) circuit board vertically to remove.

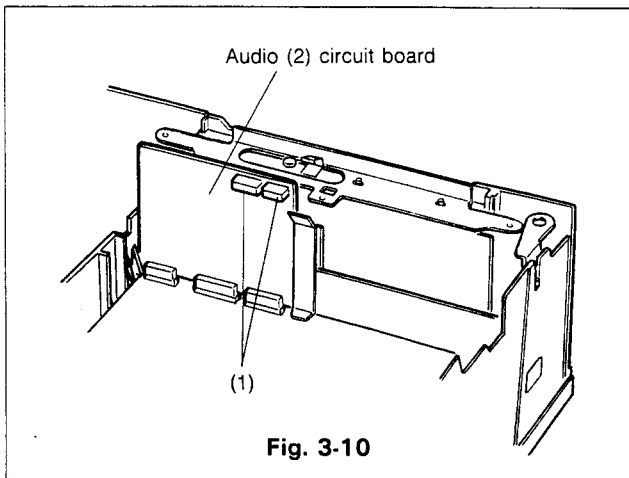


Fig. 3-10

3-11. JACK TERMINAL CIRCUIT BOARD (Figure 3-11)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Disconnect cable (1).
- (4) Remove screws (2).
- (5) Remove the holder plate (3).
- (6) Lift up the jack terminal circuit board vertically to remove.
- (7) Remove ground wire (4).

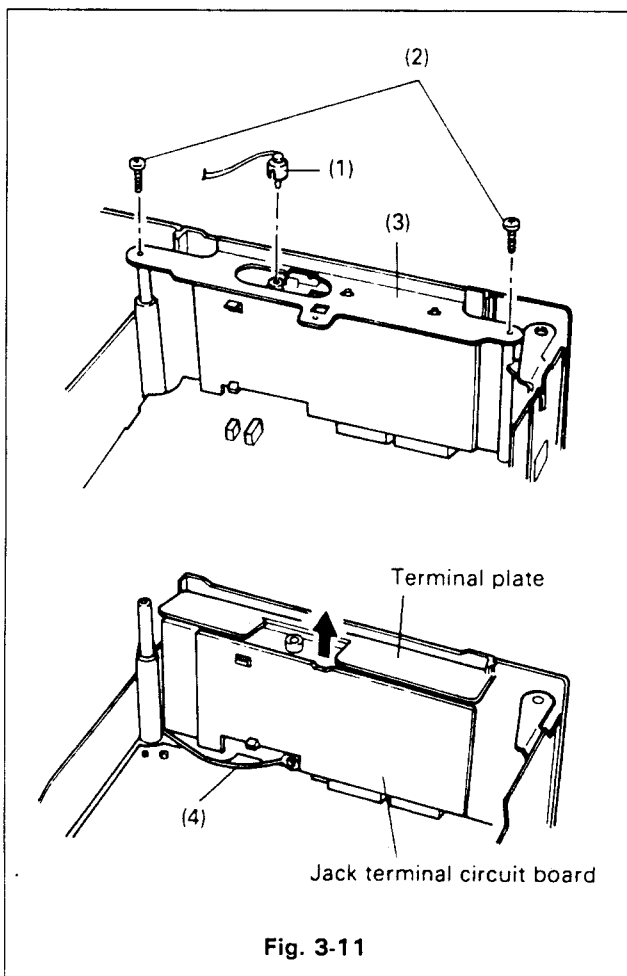


Fig. 3-11

Note:

1. The jack terminal circuit board is united with the terminal plate.
2. To install the jack terminal unit, fit the terminal plate into the mounting position until it clicks in the locked position.

3-12. SYSCON/SERVO CIRCUIT BOARD (Figure 3-12)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Remove the digital circuit board. (Refer to Item 3-5.)
- (4) Remove the video circuit board. (Refer to Item 3-6.)
- (5) Remove the decoder circuit board. (Refer to Item 3-7.)
- (6) Remove the tuner/IF circuit board. (Refer to Item 3-8.)
- (7) Remove the audio (1) circuit board. (Refer to Item 3-9.)
- (8) Remove the jack terminal circuit board. (Refer to Item 3-11.)
- (9) Disconnect flat cable (1).
- (10) Disconnect all connectors.
- (11) Remove screws (2).
- (12) Remove tab (3).
- (13) Lift up the syscon/servo circuit board vertically to remove.

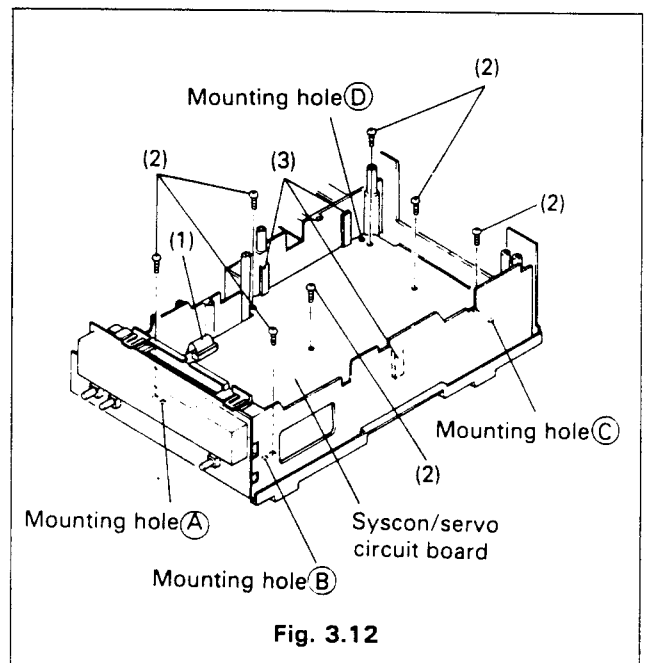


Fig. 3.12

- Note:** To install the syscon/servo circuit board, align the mounting pins with mounting holes (A), (B), (C) and (D).

4. REMOVING THE CASSETTE MECHANISM

4-1. REMOVING THE CASSETTE HOUSING ASSEMBLY (Figure 4-1)

- (1) Remove the top cover, bottom cover and front panel. (Refer to Items 1-1, 1-2 and 1-3.)
- (2) Lift up the reinforcing metal plate (1) to remove.
- (3) Remove screws (2). Pull up the rear part of the cassette housing assembly and pull backwards 4 — 5mm carefully to release the tab of the front side of the cassette housing assembly from the chassis. Then carefully pull it out upwards.
- (4) Disconnect connector (3).
- (5) Release tab (4) to remove cassette housing assembly.

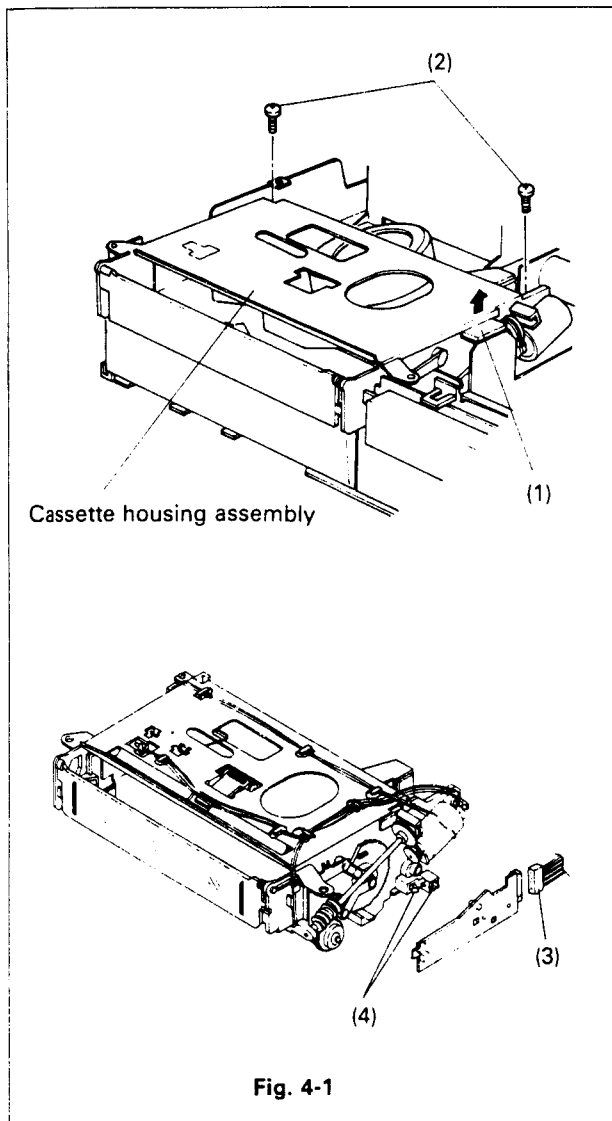


Fig. 4-1

Note: The removed two screws (2) should be used again to reinstall the cassette housing assembly. Never use screws other than removed ones.

4-2. FRONT COVER (Figure 4-2)

- (1) Remove the top cover, bottom cover and front panel. (Refer to Items 1-1, 1-2 and 1-3.)
- (2) Push the side panel (L) outward, and remove the front cover together with the front cover spring while pushing the front panel to the arrow direction.

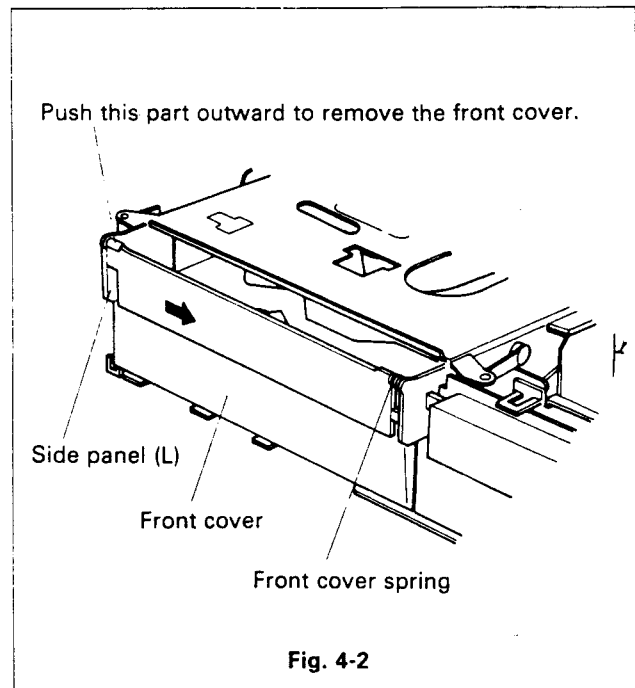
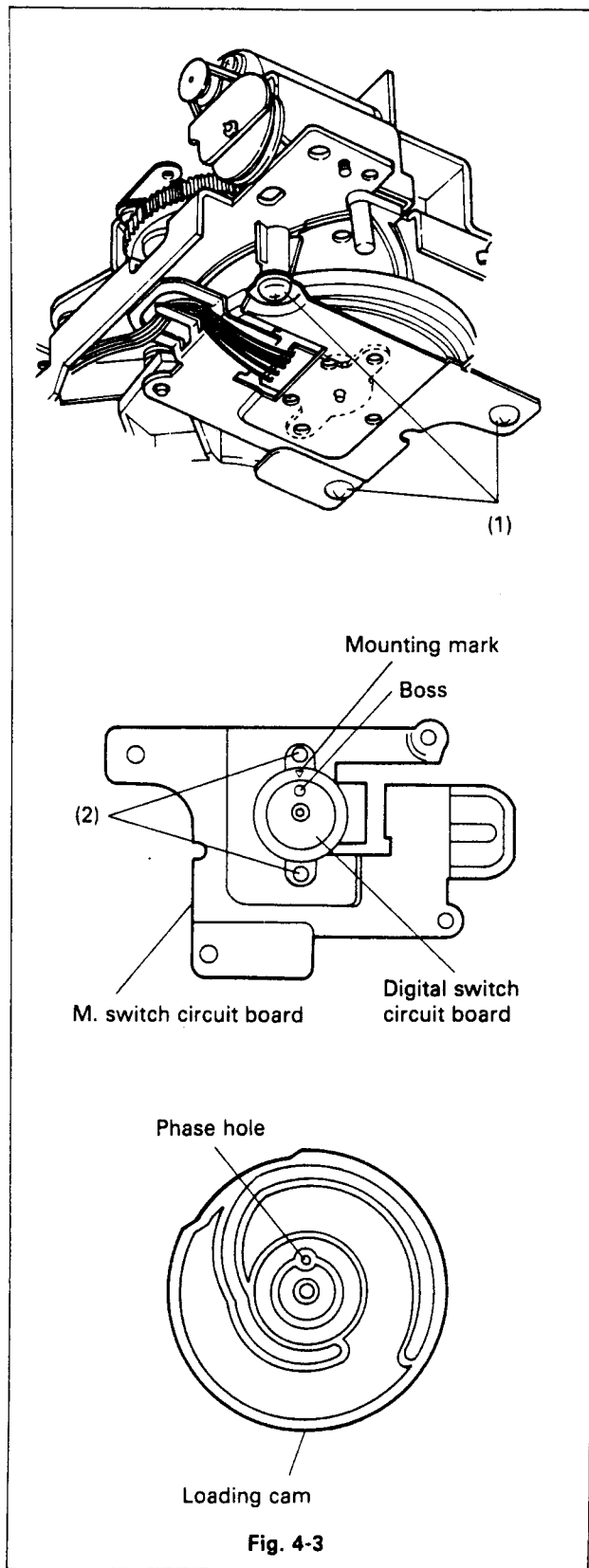


Fig. 4-2

4-3. M. SWITCH ASSEMBLY (Figure 4-3)

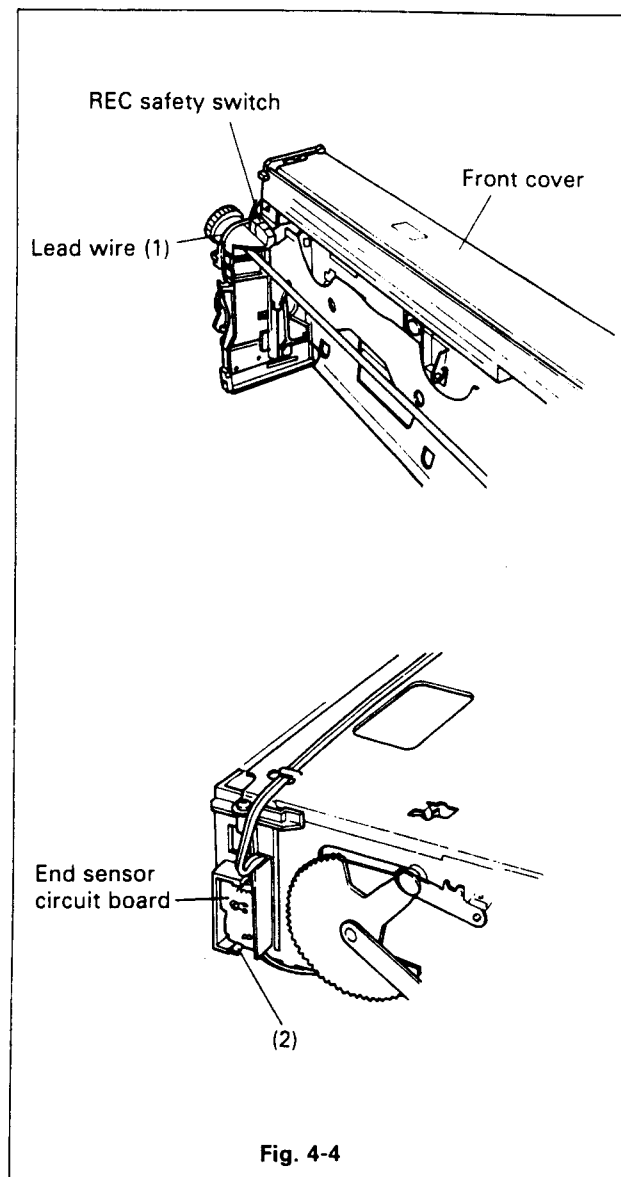
- (1) Remove the bottom cover. (Refer to Item 1-2.)
- (2) Remove screws (1).
- (3) Disconnect connector from the mecha junction circuit board to remove the M. switch assembly.
- (4) Remove screws (2) to remove the digital switch assembly.



Note: When installing the M. switch assembly, align the loading cam phase hole with the digital SW boss.

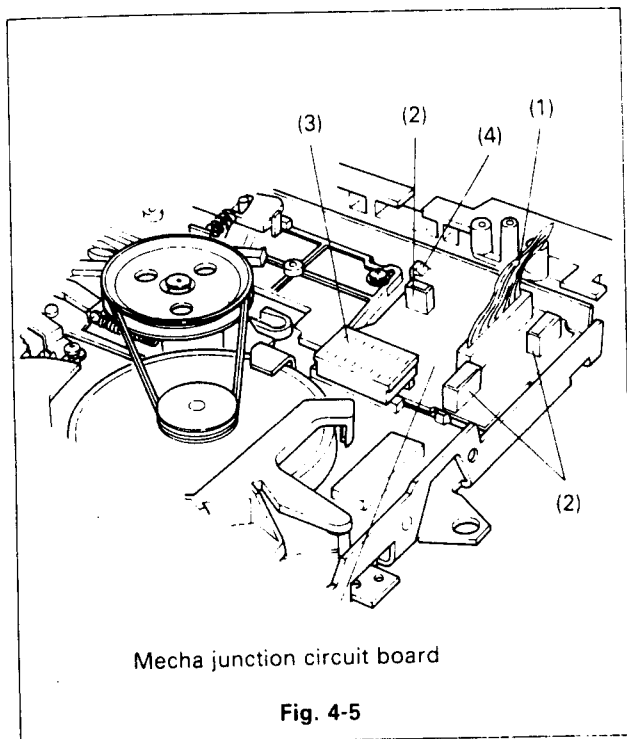
4-4. END SENSOR CIRCUIT BOARD (Figure 4-4)

- (1) Remove the top cover, bottom cover and the front panel. (Refer to Items 1-1, 1-2 and 1-3.)
- (2) Remove the cassette housing assembly. (Refer to Item 4-1.)
- (3) Remove the solder from the two lead wires (1) of the REC safety Switch located under the front cover.
- (4) Release tab (2) toward the bottom, and lift the end sensor circuit board to remove.



4-5. MECHA JUNCTION CIRCUIT BOARD (Figure 4-5)

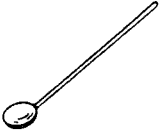
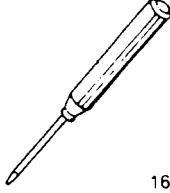
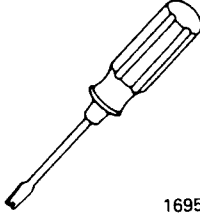
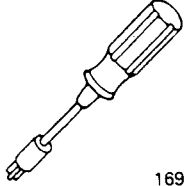
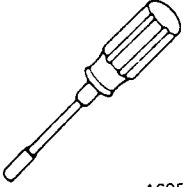


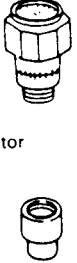
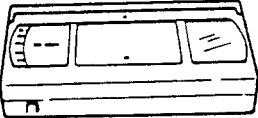
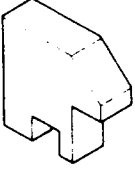
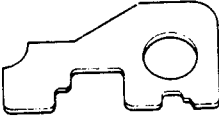
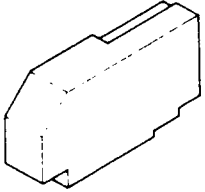
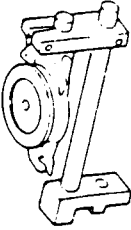
- (1) Remove the bottom cover. (Refer to Item 1-2.)
- (2) Disconnect flat cable (1).
- (3) Disconnect connector (2).
- (4) Disconnect bridge connector (3).
- (5) Release tabs (4) and lift the circuit board a little to remove.



SECTION 3 ADJUSTMENT

1. MECHANICAL ADJUSTMENT

1-1. SERVICING JIGS AND TOOLS

<p>J-1 Checking mirror For tape flow check and adjustment procedures</p>  <p>16950871</p>	<p>J-2 Plus clock driver For guide roller screw</p>  <p>16951491</p>	<p>J-3 Adjustment driver For guide roller</p>  <p>16951291</p>	<p>J-4 Adjustment driver For tapered pin of ACE head</p>  <p>16951501</p>
<p>J-5 Box driver For ACE head, T guide post and impedance roller</p>  <p>16951311</p>	<p>J-6 Alignment tape (MH-2) Overall adjusting of picture quality and tracking MH-2 79V20196</p> 	<p>J-7 Cleaning liquid (isopropyl alcohol) cleaning cloth for cleaning</p>  <p>16950001</p>	<p>J-8</p> <ul style="list-style-type: none"> ● Torque meter (600g/cm) Ass'y 79V20199 ● Torque meter 79V20200 (600g/cm) ● Torque meter adaptor 79V21508 (Substitute 79V20201)  <p>(Adaptor)</p>
<p>J-9 Back tension cassette gauge</p>  <p>79V20202</p>	<p>J-10 Height Gauge AM-3 Jig</p>  <p>16951461</p>	<p>J-12 Master Plane Jig</p>  <p>16951451</p>	<p>J-13 Height Gauge BM-3 Jig</p>  <p>16951471</p>
<p>J-14 Micro checker</p>  <p>16951401</p>			

Note: This item not available from parts dept.

Fig. 1-1

1-2. MECHANISM ASSEMBLY

1-2-1. Removing mechanism assembly (Figure 1-2)

- (1) Remove the top cover, bottom plate, and front panel. (Refer to items 1-1, 1-2, and 1-3.)
- (2) Remove the cassette housing assembly. (Refer to item 4-1).
Note: When remounting the cassette housing, use the screws (red-painted) removed. Never use other screws.
- (3) Remove the preamplifier circuit board. (Refer to item 3-2).
- (4) Disconnect the wire connector and the drum heater from the rotary drum assembly.

- (5) Remove the wire lead with a ground lug.
- (6) Disconnect the connector from the ACE head.
- (7) Disconnect the connector from the FE head.
- (8) Disconnect the flat cable connected to the mechanism junction circuit board and the system control/servo/slow circuit board.
- (9) Remove three screws (1) securing the mechanism assembly.

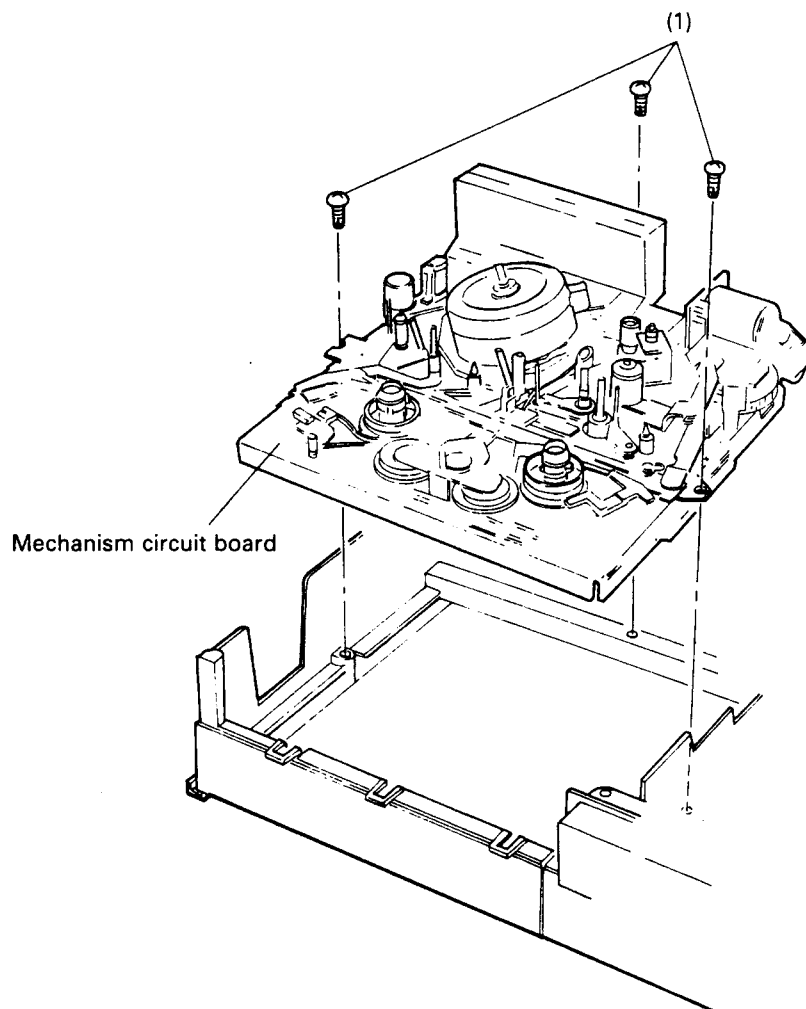
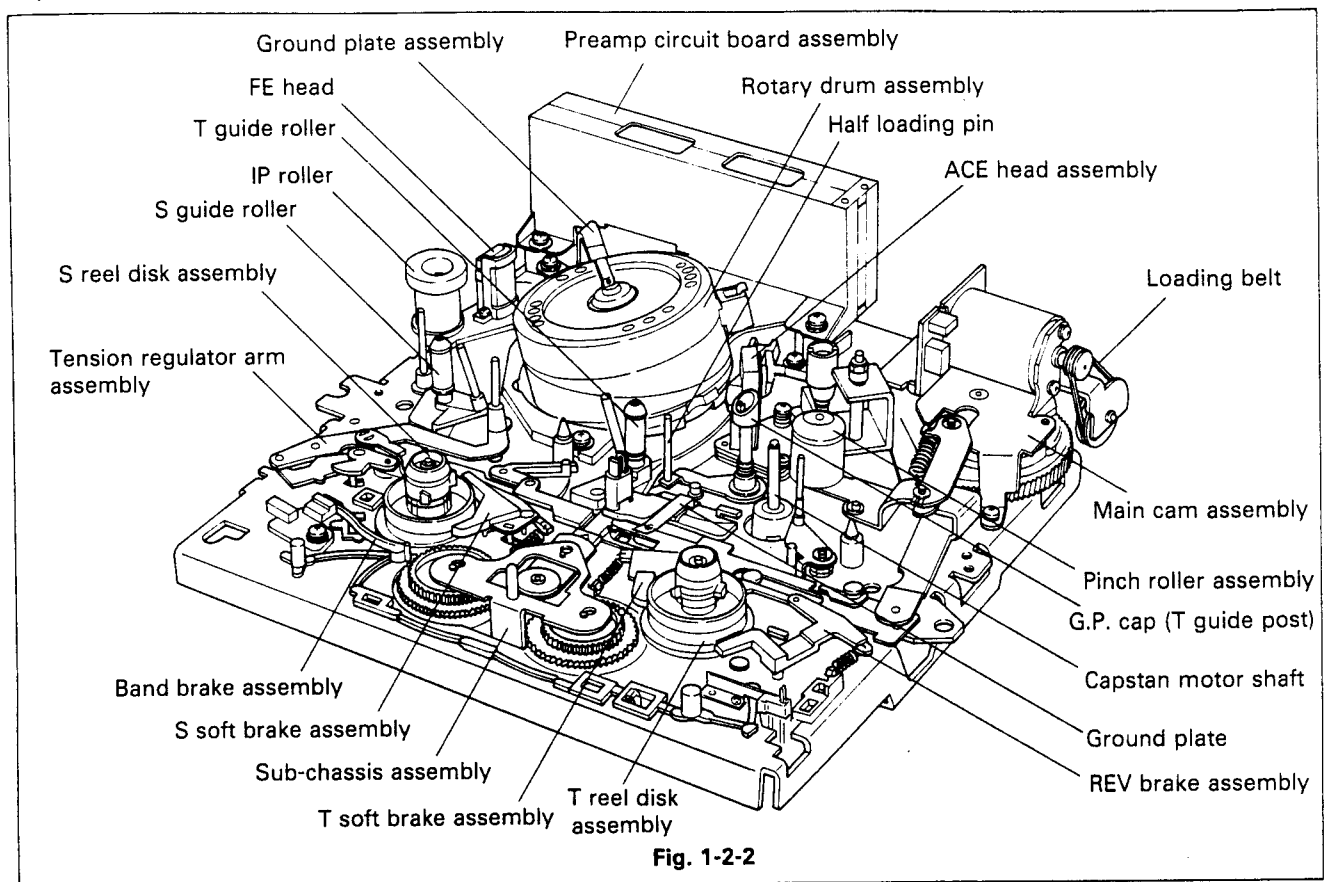


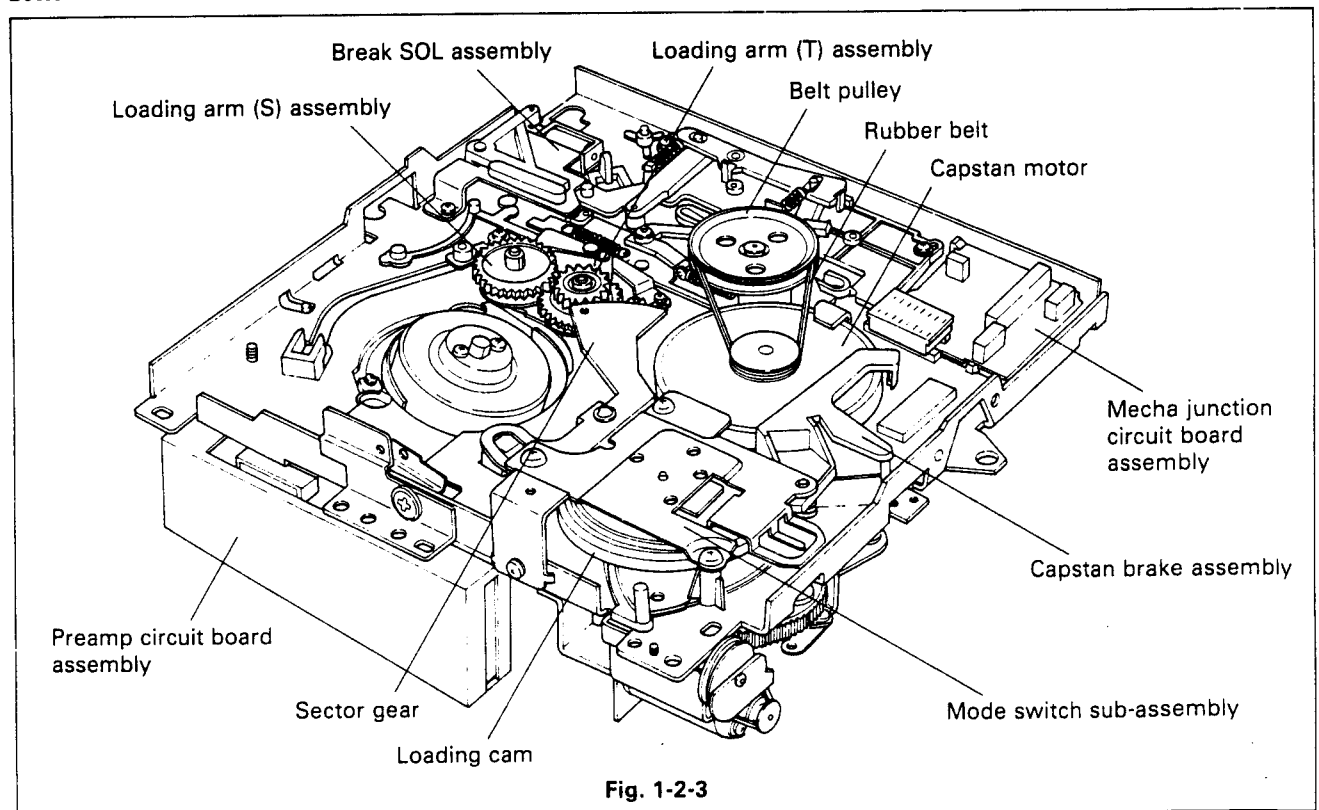
Fig. 1-2

1-2-2 Mechanism parts locations (Fig. 1-2-2, 1-2-3)

Top view



Bottom view



1-3 BEFORE DISASSEMBLING PARTS ON THE CHASSIS (Figure 1-3)

(1) Screws shown below need readjustment when they are once loosened or turned for part replacement. Do not tamper the screws.

- | | |
|---|---|
| 1) IP roller height adjustment nut | 5) ACE head azimuth adjustment nut |
| 2) T/S guide roller height adjustment screw | 6) ACE head tilt adjustment screw |
| 3) ACE head X position adjustment nut (taper pin) | 7) T guide post height adjustment nut |
| 4) ACE head height adjustment screw | 8) Back tension (band brake) adjustment screw |

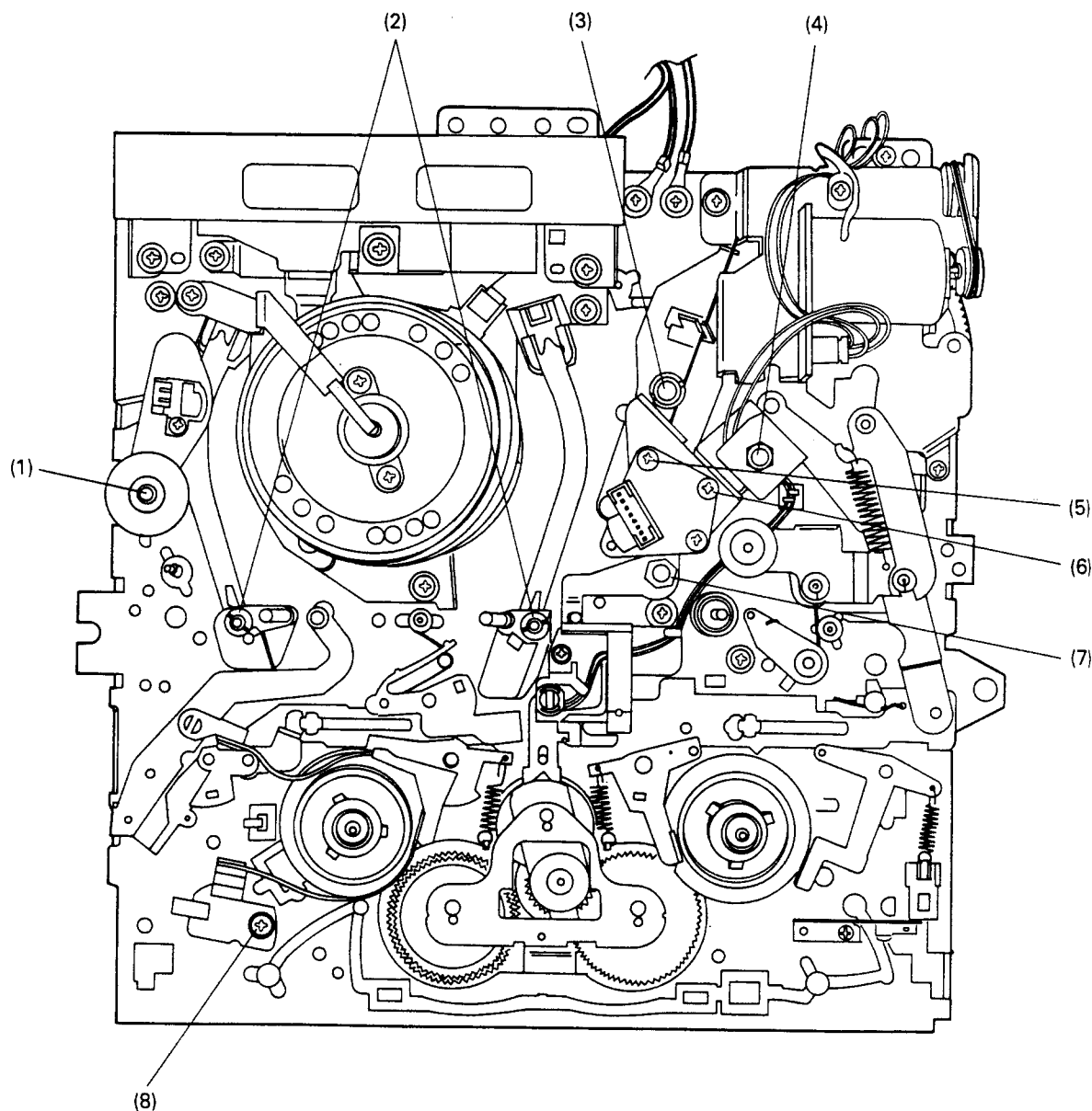
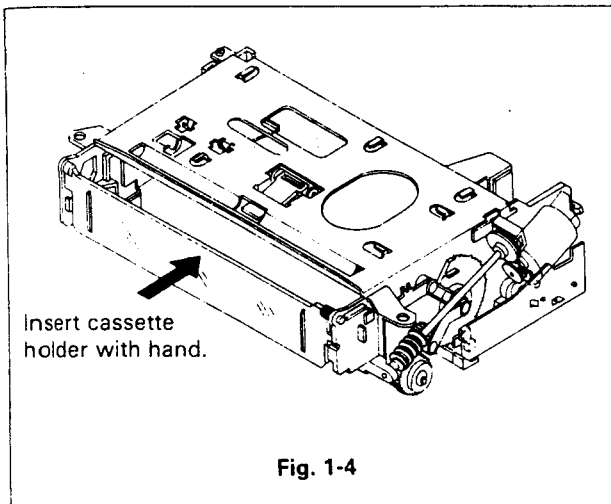


Fig. 1-3

Note: When a position adjustment nylon nut is removed with some part(s), always use the same nut when remounting the part(s).

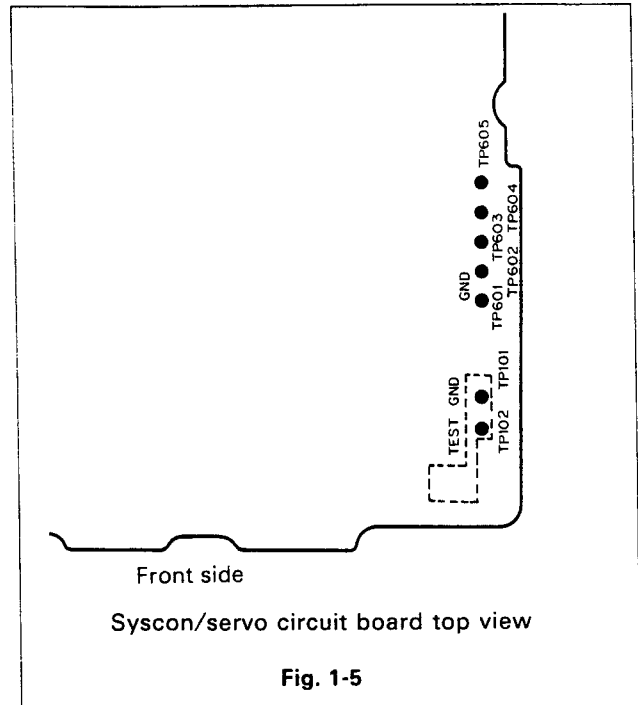
1-4. BEFORE ADJUSTING THE MECHANISM (Figure 1-4)

- (1) This section describes adjustment procedures used when some mechanical parts are replaced because of their wearing or damage.
- (2) Since mechanism adjustments closely relate to electrical adjustments, also refer to the electrical adjustments when the mechanism adjustments have been performed.



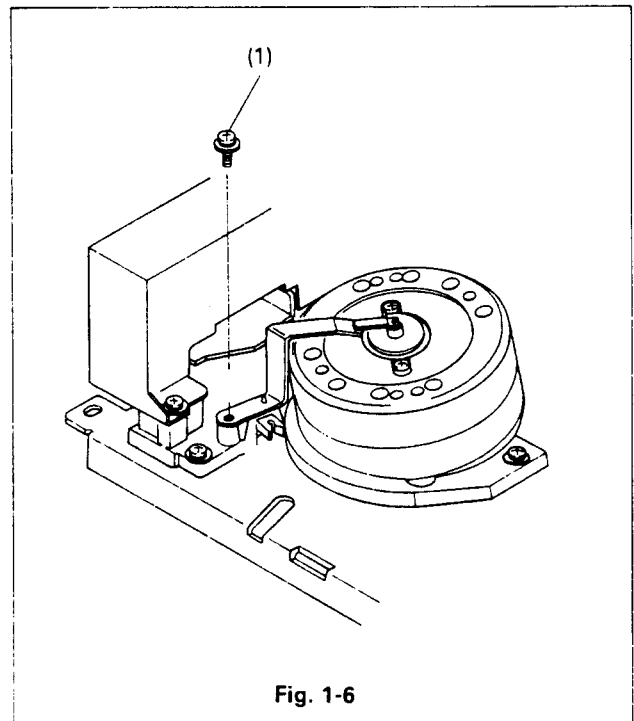
1-5. SERVICING PRECAUTIONS (Figure 1-5)

- (1) When servicing a VCR with the cover removed and the circuit board exposed, take care on holding (standing) direction of the VCR and the location to be placed on.
- (2) Also take care do not miss the screws removed. Prepare a box and place all screws removed into the box.
- (3) When testing or checking with the unit placed upright, take care not to fall over the unit.
- (4) When operating the unit with no cassette installed, connect TP101 and TP102 on the system controller/servo circuit board as shown in Figure 1-5, using a wire lead with alligator clips at its ends.
- (5) Normally, set the unit to the EJECT mode when replacing mechanisms.



1-6. REPLACEMENT OF GROUND PLATE ASSEMBLY (Figure 1-6)

- (1) Remove screw (1) and remove the ground plate assembly.
- (2) When remounting the the assembly, position the assembly so that its contact touches the center of the drum assembly shaft and then tighten the screw (1).

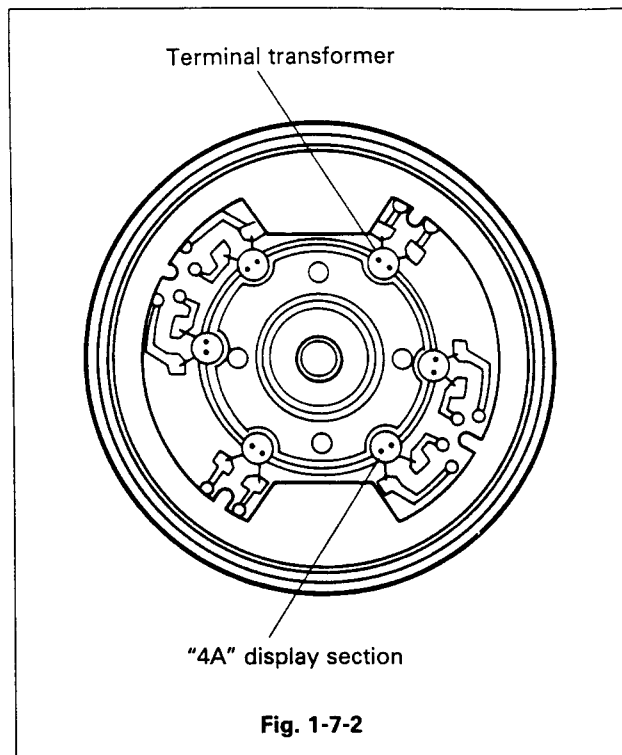
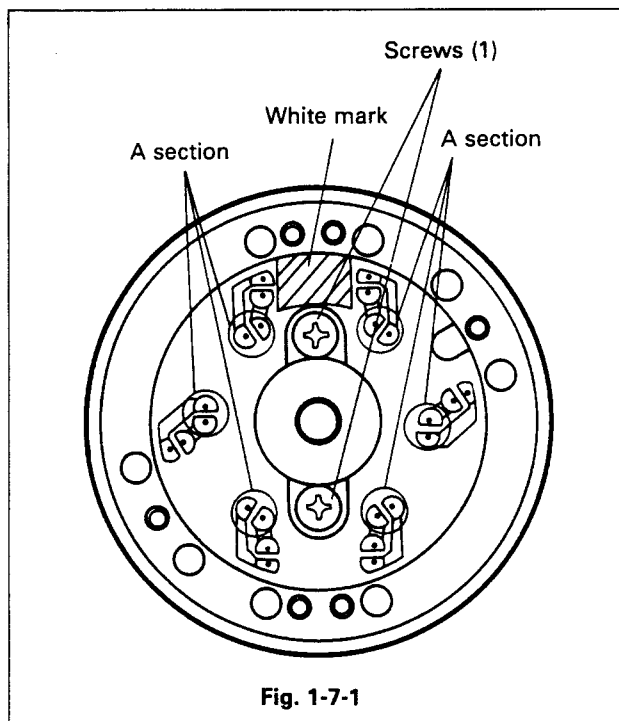


1-7. REPLACEMENT OF ROTARY DRUM ASSEMBLY (Figures 1-7-1, 1-7-2)

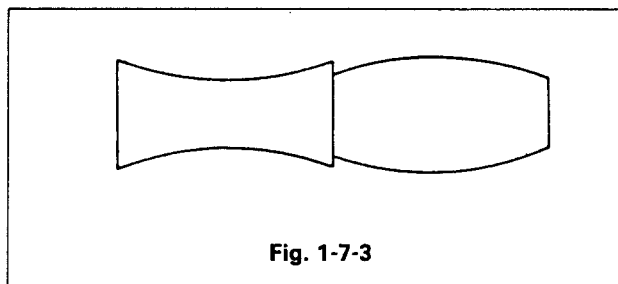
- (1) Remove the ground plate assembly, refer to item 1-6.
- (2) Desolder wire leads soldered at twelve locations marked A as shown in Figure 1-7-1.
- (3) Remove two screws (1) and then the drum assembly upward.
- (4) Clean the flange surfaces of the lower drum and the rotary drum assembly, using alcohol (isopropyl). Next, position the rotary drum assembly so that its white mark faces the mark "4A" on the rotary transformer as shown in Figure 1-7-2, and then make sure eight pins of the terminal transformer are matching to the holes of the circuit board provided on top of the rotary drum assembly. Then carefully slide down the rotary drum in place.

Note: 1) Do not touch the head tips with your hand or damage the head tips.
2) If the drum assembly jams when it is sliding down, do not attempt to force the drum. Remove the drum, and try again in such a case.

- (5) Tighten two screws (1) alternately and securely solder the leads at twelve "A" sections.
- (6) Mount the ground plate assembly. (Refer to item 1-6)



- (7) After the replacement, confirm following points:
 - 1) Rotary drum assembly eccentricity
 - ① Record a signal in the EP mode with the unit under test and playback the signal. Observe the envelope of the signal. If the envelope as shown in figure 1-7-3 is observed, the eccentricity adjustment should be made. (If the envelope is flat, no adjustment is required.)



- 2) Rotary drum assembly eccentricity adjustment
 - ① Set the unit to the playback mode without a cassette. Turn off the power and remove the AC cord. (Refer to items 1-4, 1-5.)
 - ② Remove the cassette housing. (Figure 4-1)
 - ③ Mount the microchecker with screws as shown in Figure 1-7-4.

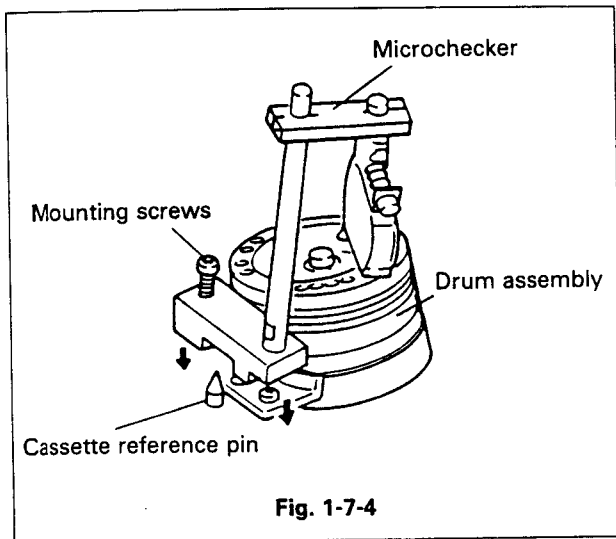


Fig. 1-7-4

- 3) Mounting and adjustment of the microchecker
 - ① Carefully handle the microchecker as it is a precision instrument. (Figure 1-7-5)
 - ② When mounting the microchecker, take care not to touch the drum assembly.
 - ③ Before mounting the checker, loosen the fine adjustment knob by turning it counterclockwise.

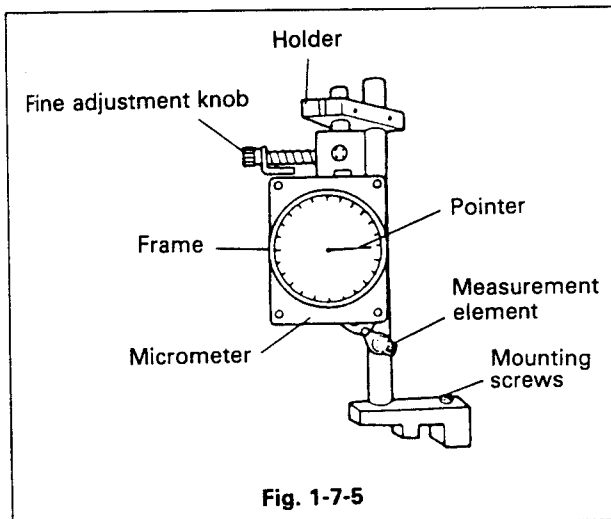


Fig. 1-7-5

- ④ Confirm the microchecker is mounted correctly, refer to below:

- a: The measurement Measuring element should be located 1-2mm away from upper edge of the tape contact surface of the rotary drum assembly.
- b: The measurement Measuring element should be moved back and forth along central direction of the rotary drum.

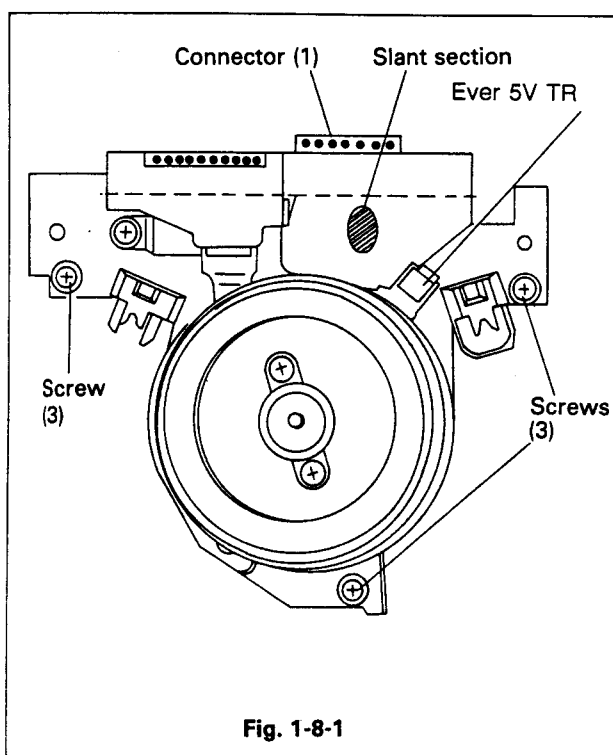
- ⑤ Turn the fine adjustment screw clockwise until the Measuring element touches the rotary drum and the dial shows "0".
- ⑥ Slowly rotate the rotary drum by one turn and observe reading of the dial pointer.
- ⑦ If the reading is less than $3\mu\text{m}$ no adjustment is necessary. If the reading is higher than $3\mu\text{m}$, turn the fine adjustment screw counterclockwise and remove the probe. Next, loosen the two rotary drum mounting screws (1) and adjust the drum position. Then tighten the drum securing screws alternately and repeat the steps 5 via 6 until a desired value is obtained.
- ⑧ After completion of the adjustment, turn the fine adjustment screw counterclockwise and remove the measurement Measuring element first, then the microchecker.
- ⑨ Mount the cassette housing again, and turn on the power.
- 4) After the replacement, perform following checks and adjustments.
 - ① ACE head position adjustment
 - ② Playback switching adjustment
 - ③ Entire video and servo systems and the audio circuit

1-8. REPLACEMENT OF DRUM ASSEMBLY (Figure 1-8-1)

- (1) Remove the ground plate assembly. (Refer to item 1-6.)
- (2) Remove the preamplifier circuit board. (Refer to item 3-3.)
- (3) Disconnect the connector (1) and the drum heater (2) from the drum assembly.
(When disconnecting the connector (1), hold the shaded area of the circuit board.)
- (4) Remove three screws (3) and remove the drum assembly.

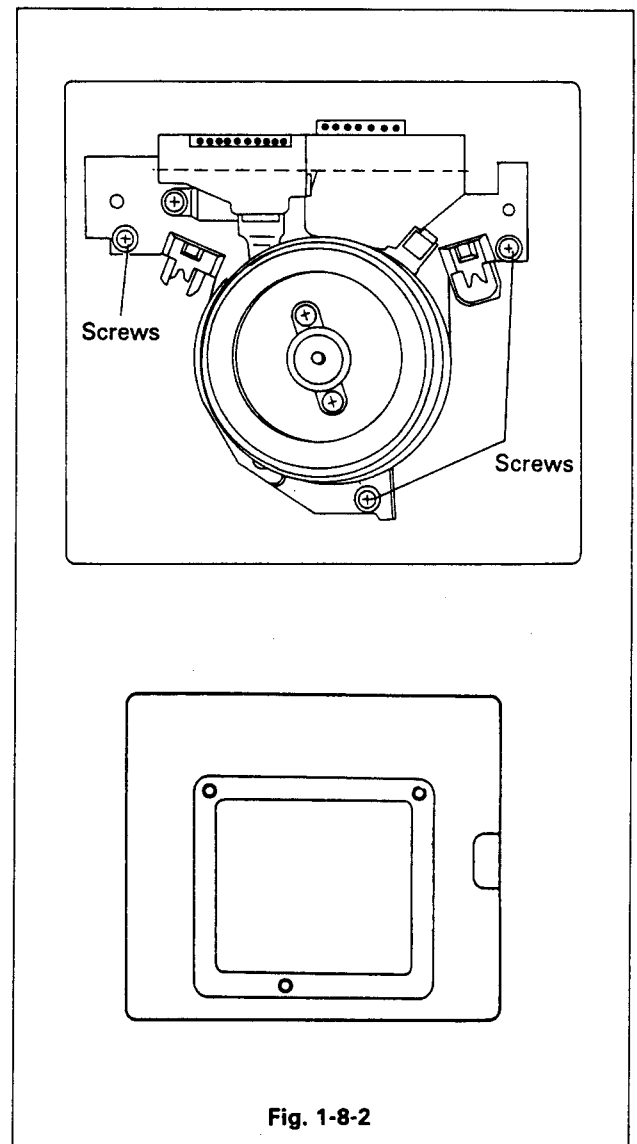
Note: When removing the drum assembly, do not touch or damage the head tips on the drum.

- (5) When remounting the drum assembly, use the same procedure shown above in reverse order.



- (6) After the replacement, perform the following checks and adjustments:
 - 1) Tape path adjustment
(Refer to item "2 Tape path check and adjustment".)
 - 2) Interchangeability adjustment
(Refer to item "3 Interchangeability adjustment".)
 - 3) Check or adjustments for entire servo, video, and audio circuit systems. For the adjustments, refer to items 4-2, 4-3, 4-4, and 4-7.)
- (7) Unpacking drum service part (Figure 1-8-2)
When taking out a spare drum assembly from the package, remove three black screws first, and then remove the partition board, and then the drum.

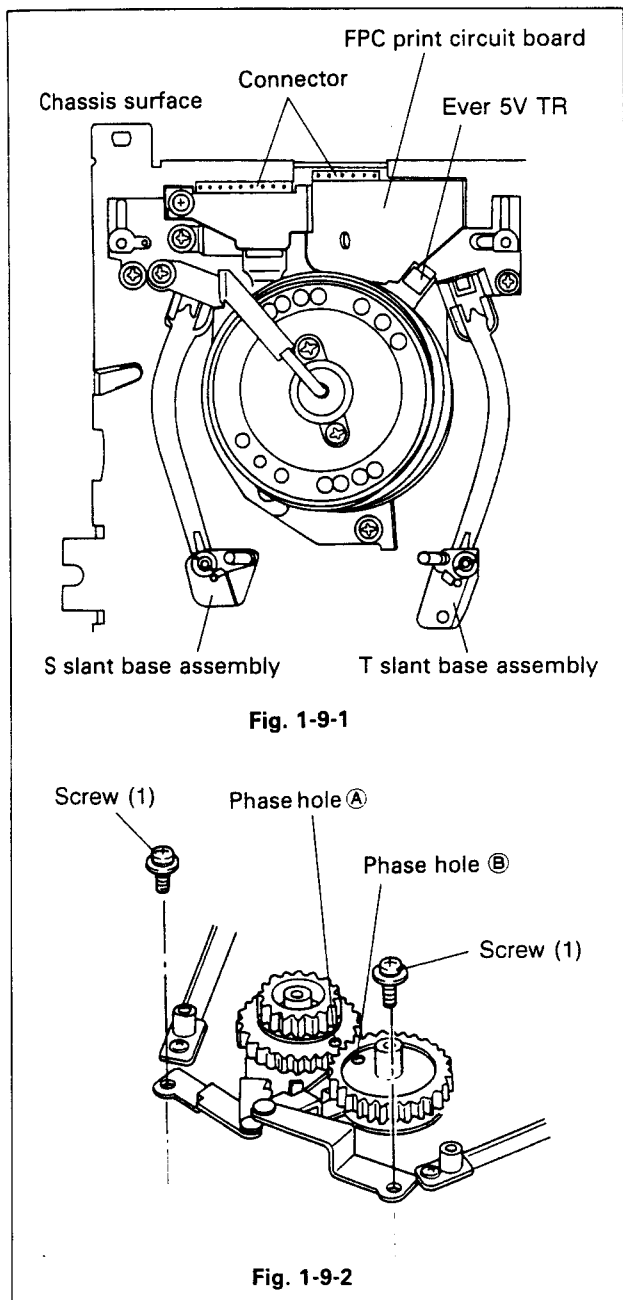
Note: Carefully handle the drum to prevent it from dropping, deformation, scratch, dirty, etc.



1-9. REPLACEMENT OF S-SLANT BASE ASSEMBLY AND T-SLANT BASE ASSEMBLY (Figure 1-9)

- (1) Place the unit up side down.
- (2) Remove screw (1).
- (3) When remounting use the same procedures shown above in reverse order.
- (4) When reassembling, phase holes (A) and (B) should be coincided.

Note: 1. When remounting use the same screws just removed, do not use other screws.
2. When removing, do not touch the rotary drum.



1-10. REPLACEMENT OF IP ROLLER (Figure 1-10)

- (1) Remove the nylon nut and remove the poly- slider, IP roller, IP roller, and IP flange.

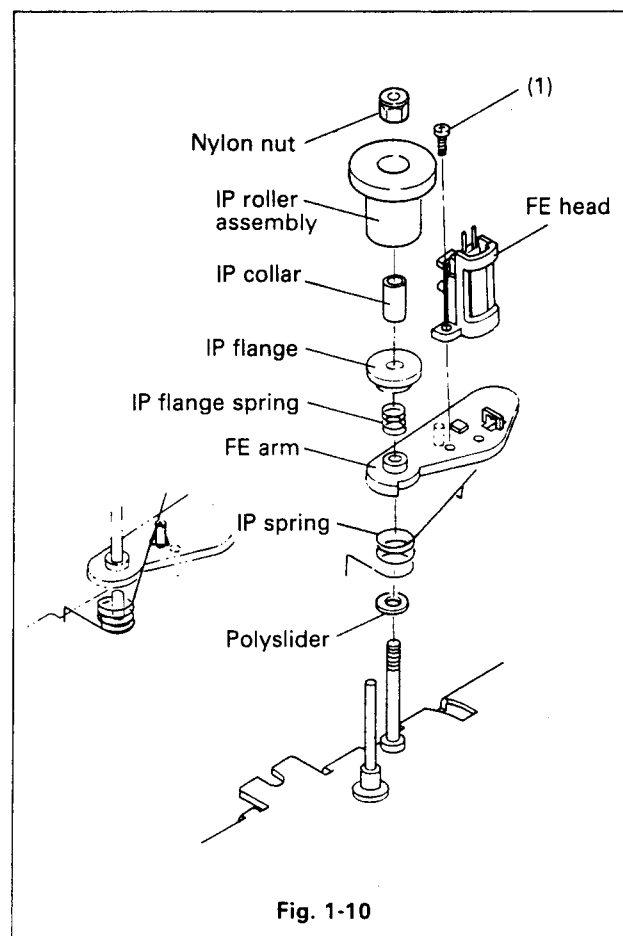
Note: When removing the nylon nut, hold the FE arm with hand so that nothing touches the rotary drum.

- (2) Remove the FE arm and the IP spring.
- (3) When reassembling, first hook one (longer) end of the IP spring on the lower tab of the FE arm base and use the same procedures shown above in reverse order.

1-11. REPLACEMENT OF FE HEAD (Figure 1-10)

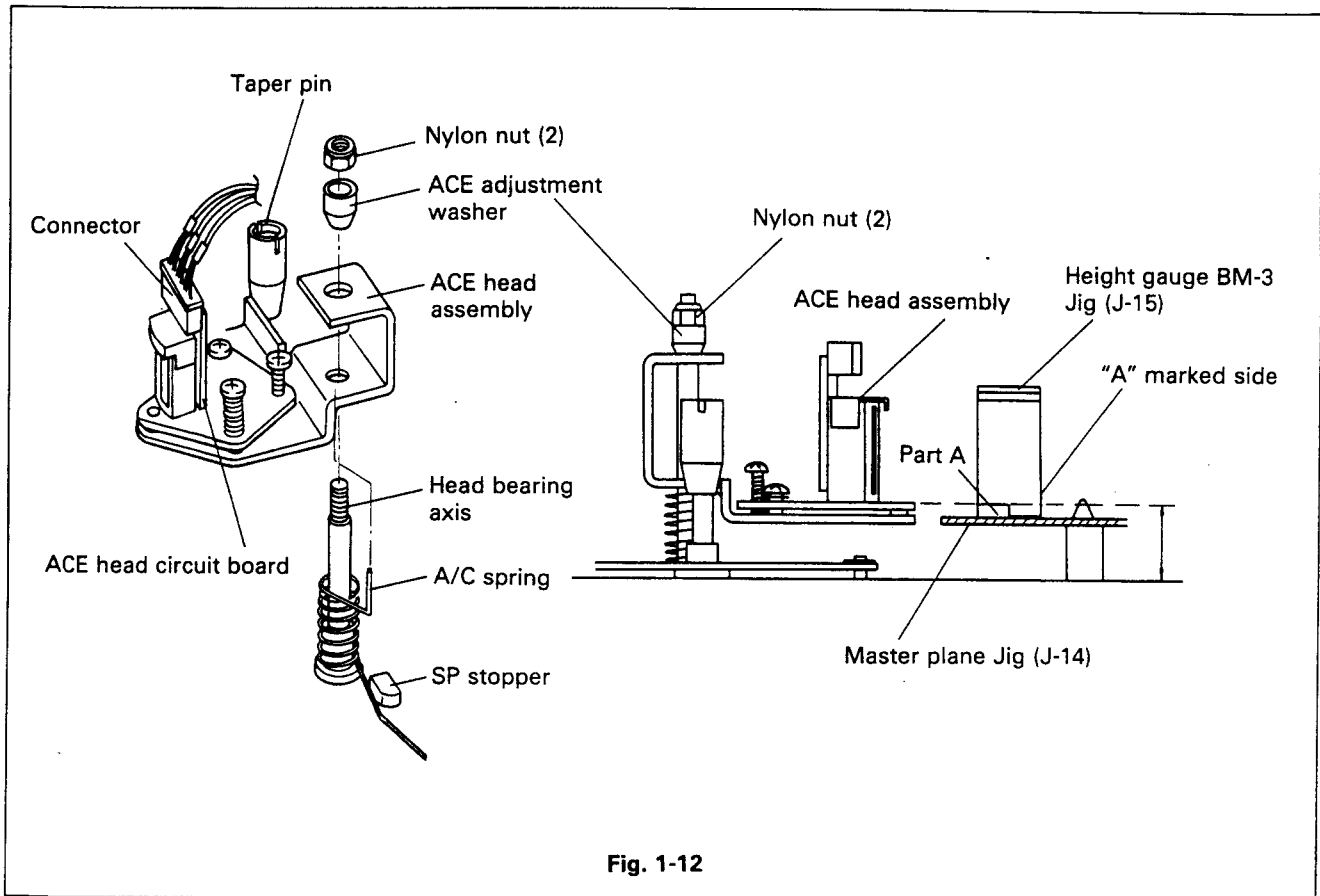
- (1) Disconnect the connector from the FE head.
- (2) Remove the screw (1) securing the FE head and remove the FE head.
- (3) When remounting the FE head, use the same procedures shown above in reverse order.

Note: After completion of the FE head replacement, apply screw lock.



1-12. REPLACEMENT OF AUDIO/CONTROL HEAD (Figure 1-12)

- (1) Disconnect the connector from the ACE circuit board.
- (2) Remove the nylon nut (2), using a box driver (J-5).
- (3) Turn the ACE head counterclockwise to separate it slightly from the taper pin, and then slide it upward to remove it from the head shaft. In this case, take care the head assembly is loaded by the A/C spring.
- (4) When reassembling the ACE head, use the same procedures shown above in reverse order.
- (5) After completion of the replacement, perform the ACE head height adjustment.
- (6) Place the master plane Jig (J-14) on the chassis. Place the height gauge BM-3 (J-15) with the mark "A" faced down on the master plane, and adjust the nylon nut (2) with the box driver (J-5) until the ACE headbase height reaches the same level as that of the "A" part.



Note: After completion of the ACE head replacement, perform the ACE head height and azimuth adjustments described under item 3-4 and the CTL position adjustment shown in item 3-5.

1-13. REPLACEMENT OF SECTOR GEAR (Figure 1-13)

* Before replacing the gear, always make sure the unit is in the EJECT mode.

[To remove]

- (1) Remove the M switch assembly. (Refer to item 4-3.)
- (2) Remove the retaining ring (1) and slide the sector gear upward.

[To reassemble]

- (1) First, make sure the loading cam is mounted in the correct position. (Refer to item 1-14.)
- (2) Position the sector gear so that its phase hole ⑥ aligns with the position adjustment slot ③ on the loading arm T assembly as shown in Figure 1-13-2.
- (3) Mount the retaining ring (1).
- (4) Mount the M switch assembly. (Refer to item 4-3.)

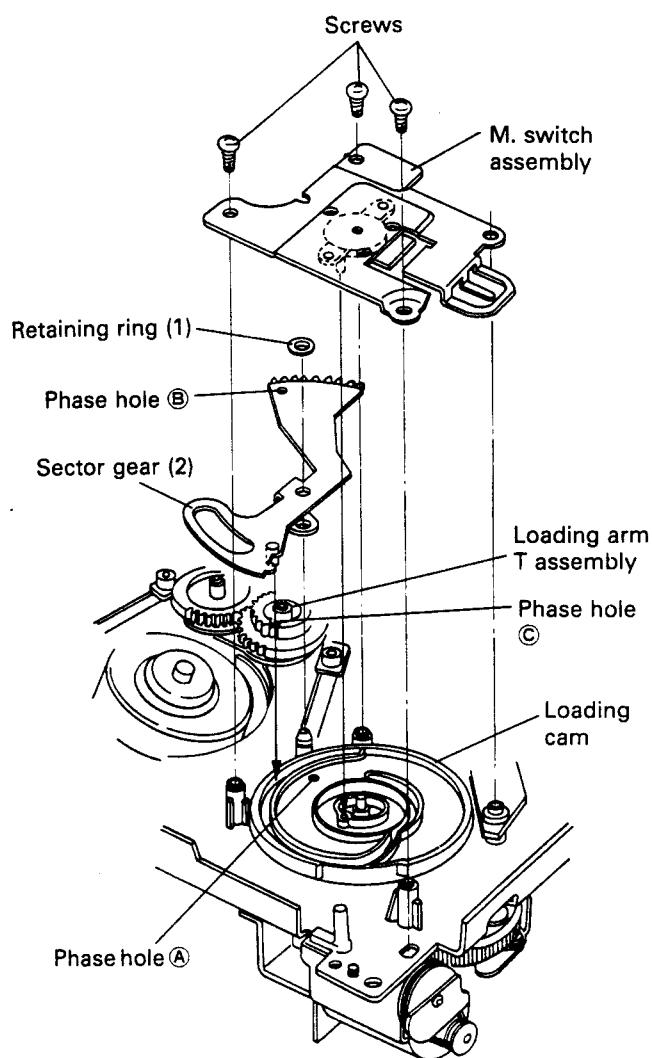


Fig. 1-13-1

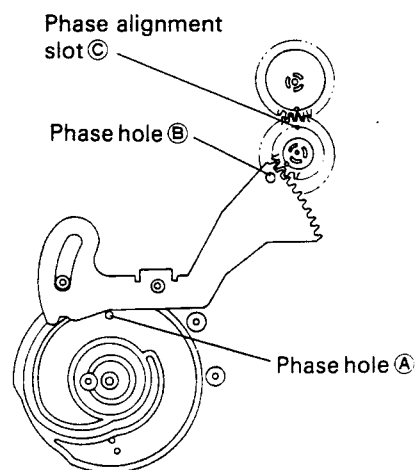


Fig. 1-13-2

1-14. REPLACEMENT OF LOADING CAM (Figure 1-14)

* Before replacing the cam, always make sure the unit is in the EJECT mode.

[To remove]

- (1) Remove the M switch assembly. (Refer to item 4-3.)
- (2) Remove the sector gear. (Refer to item 1-13.)
- (3) Remove the loading cam.

[To reassemble]

- (1) When reassembling the loading cam first, make sure the phase hole ② of the link (M) assembly and the phase hole ③ of the mechanism chassis are coincided.
- (2) When remounting the loading cam, mount the cam so that the phase hole ① of the loading cam aligns with the phase hole ③ of the mechanism chassis. In this case, take care the boss of the link (M) assembly fits into the slot of the loading cam precisely and the phase hole ② of the link (M) assembly aligns with the phase hole ③ of the mechanism chassis.
- (3) Mount the sector gear. (Refer to item 1-13.)
- (4) Mount the M switch assembly. (Refer to item 4-3.)

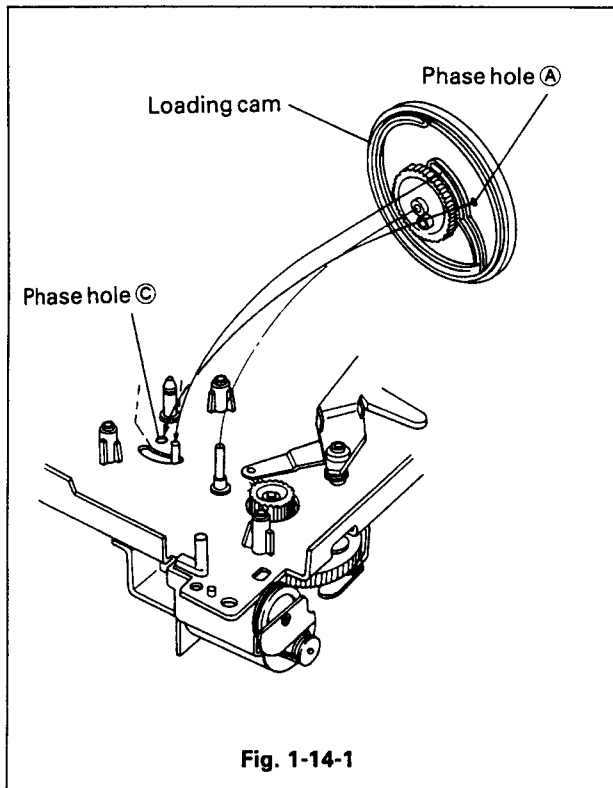


Fig. 1-14-1

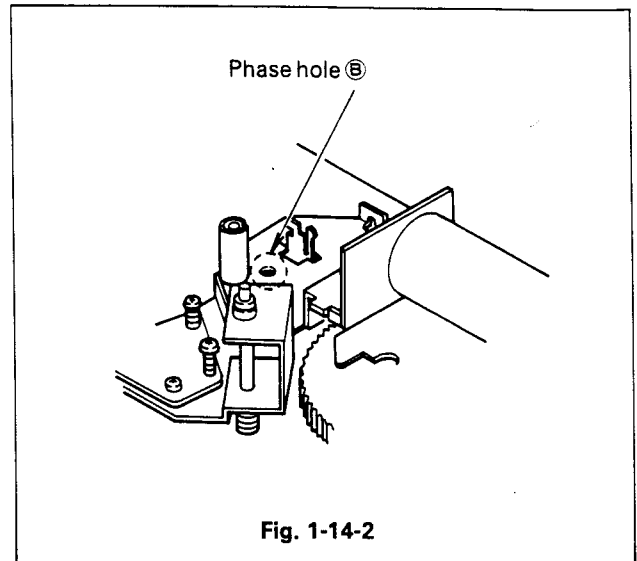


Fig. 1-14-2

1-15. REPLACEMENT OF PINCH ROLLER ASSEMBLY (Figure 1-15)

- (1) Remove the retaining ring (1).
- (2) Remove the retaining ring (2).
- (3) Remove the pinch roller assembly by sliding it upward.
- (4) When mounting a new one, use the same procedures shown above in reverse order.

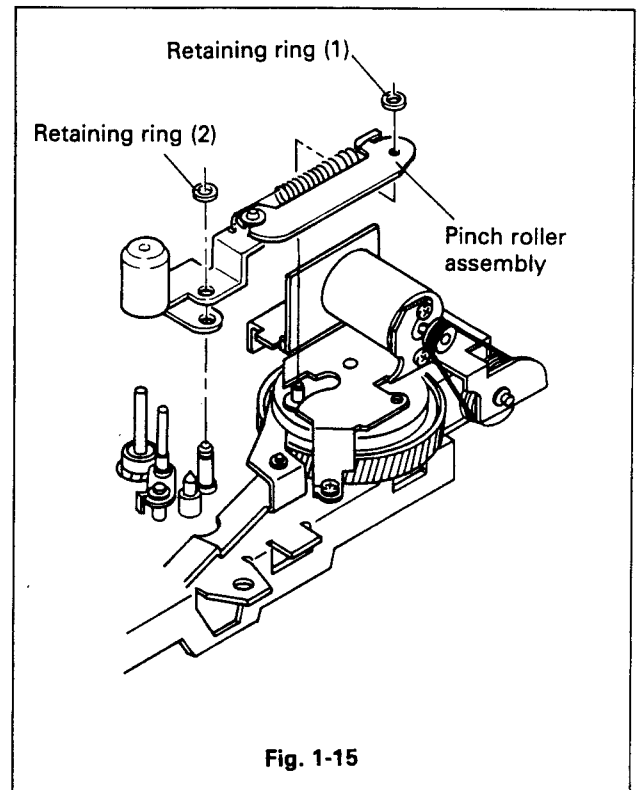
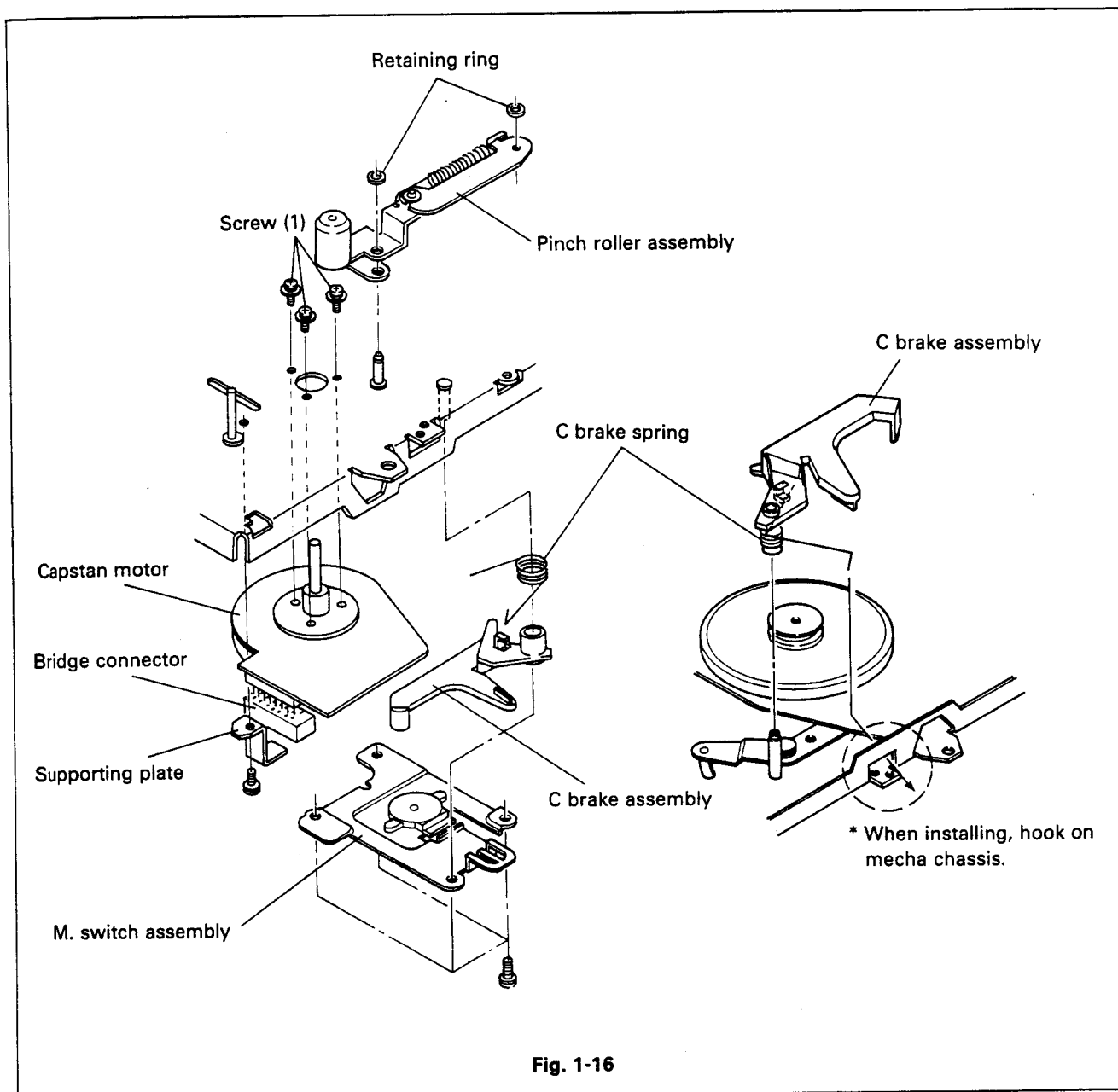


Fig. 1-15

1-16. REPLACEMENT OF CAPSTAN MOTOR (Figure 1-16)

- (1) Remove the belt.
- (2) Remove the bridge connector.
- (3) Remove the supporting plate.
- (4) Remove the M switch assembly. (Refer to item 4-3.)
- (5) Remove the C brake assembly.
- (6) Remove the pinch roller assembly. (Refer to item 1-15.)
- (7) Remove the screw (1) and then capstan motor.

Note: When replacing the capstan motor, take care not to damage the capstan shaft and magnetize the shaft.



1-17. REPLACEMENT OF MAIN CAM ASSEMBLY (Figure 1-17)

* Before replacement, always make sure the unit is in the EJECT mode.

[To remove]

- (1) Make sure the phase holes ㉑, ㉒, ㉓, and ㉔ are aligned in line through the pulley of the main cam assembly. (This condition is the same as that of the EJECT mode.)
- (2) Remove the pinch roller assembly. (Refer to item 1-15.)
- (3) Remove the wire connector (1).
- (4) Remove the retaining ring (2) and then the upper arm assembly.
- (5) Remove the screw (3) and remove the main cam assembly upward.

[To reassemble]

- (1) Align the phase hole ㉕ of the lower arm assembly and the phase hole ㉖ on the mechanism chassis in a line.
- (2) When mounting the main cam assembly, make sure the main cam phase holes ㉑, ㉒, ㉓ and the phase hole ㉔ on the mechanism chassis are aligned in a line, and then mount the assembly with screw (3). The boss of the lower arm assembly fits precisely into the slot on the main cam.
- (3) Position the upper arm assembly so that its phase hole ㉗ fits to the phase hole ㉖ on the mechanism chassis, and then insert the boss on the A part of the upper arm assembly into the sleeve on right end of the main rack. Mount the retaining ring (2).
- (4) Mount the pinch roller assembly. (Refer to 1-15.)
- (5) Mount the wire connector (1).

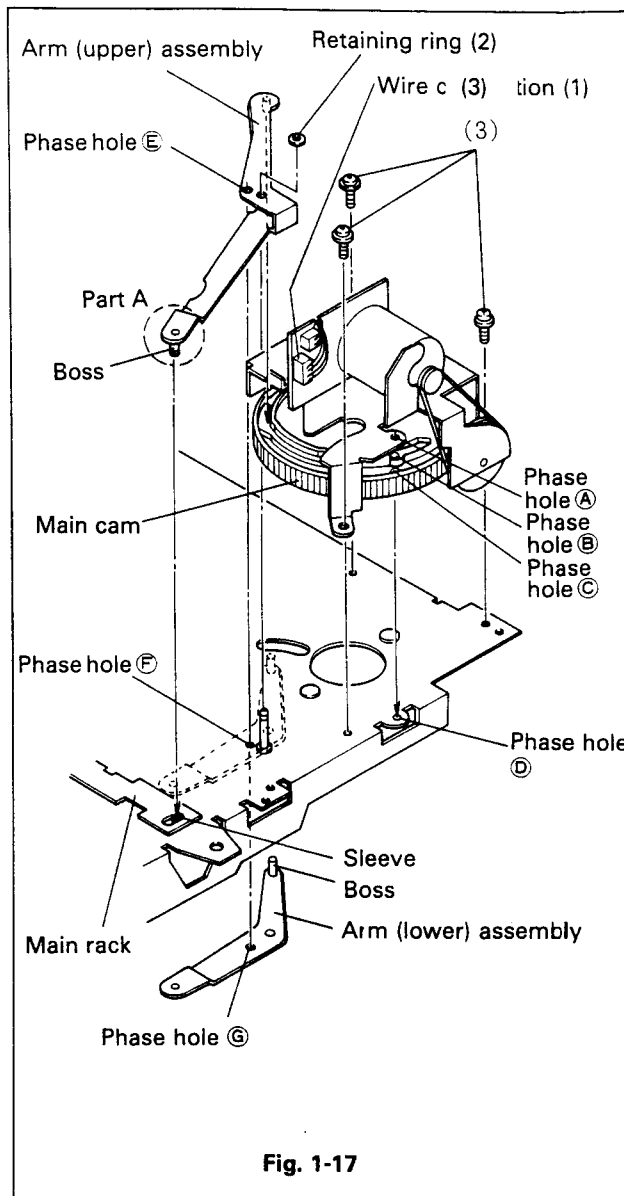


Fig. 1-17

1-18. REPLACEMENT OF SOL LINK LEVER (Figure 1-18-1)

[To remove]

- (1) Slide the SOL link lever upward and remove the lever, taking care not to miss the absorbing strap of the brake SOL assembly.

[To assemble]

- (1) Insert the plunger boss of the brake SOL assembly into the hole on the SOL link lever to mount the plunger precisely onto the SOL link lever slot. Make sure motion of the absorbing strap is smooth.

1-19. REPLACEMENT OF BRAKE SOL ASSEMBLY (Figure 1-18)

[To remove]

- (1) Remove the SOL link lever. (Refer to Figure 1-18.)
- (2) Remove the screw (1), disconnect the wire connector of the mechanism junction, and remove the brake SOL assembly.

[To reassemble]

- (1) Mount the brake SOL assembly accurately with the screw (1) in the place it was mounted.
- (2) Remove the SOL link lever. (Refer to item 1-18.)
- (3) For routing of the wire leads of the brake SOL assembly, refer to Figure 1-18-2.

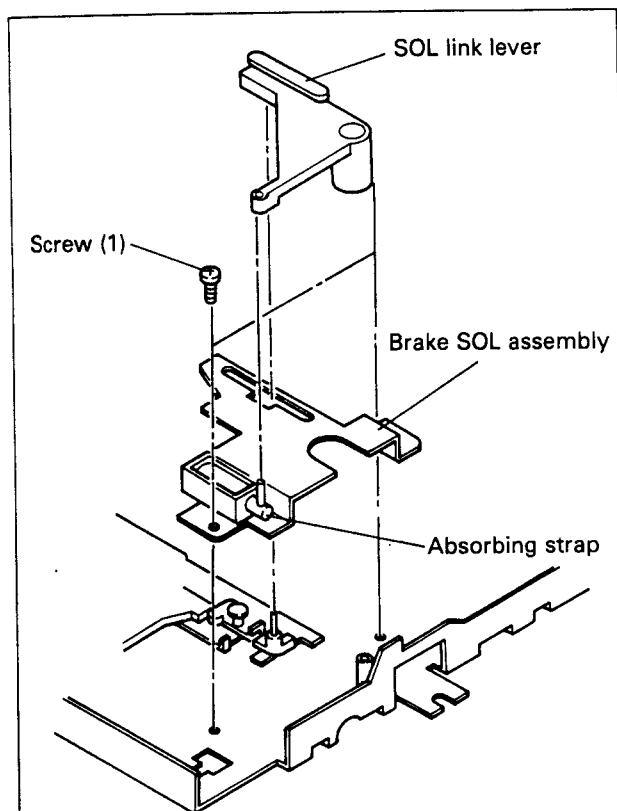


Fig. 1-18-1

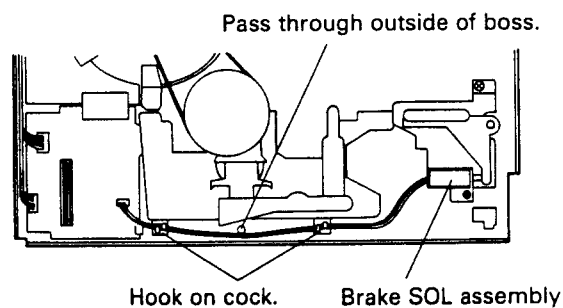


Fig. 1-18-2

1-20. REPLACEMENT OF T MAIN BRAKE ASSEMBLY AND S MAIN BRAKE ASSEMBLY (Figure 1-20)

- (1) Remove the retaining ring (1) and the belt pulley.
- (2) Remove the spring (1).
- (3) Remove the T main brake assembly upward.
- (4) Remove the retaining ring (2) and remove the S main brake assembly upward.
- (5) When reassemble the T main brake assembly and the S main brake assembly, use the same procedures shown above in reverse order.

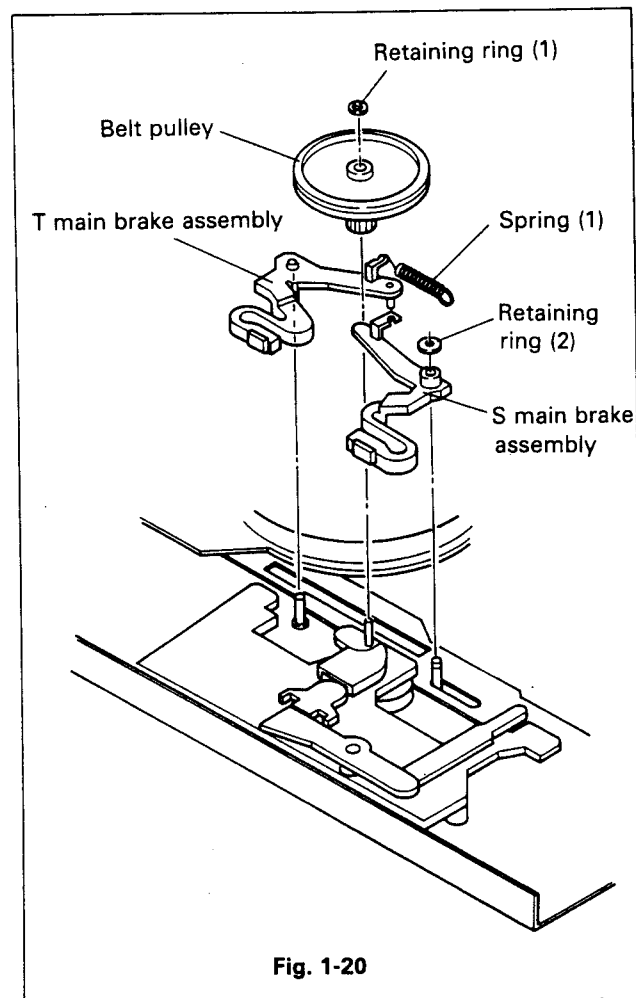


Fig. 1-20

1-21. REPLACEMENT OF SUB-CHASSIS ASSEMBLY (Figure 1-21)

- (1) Place the mechanism chassis up side down.
- (2) Remove the rubber belt.
- (3) Remove the belt pulley. (Refer to 1-20.)
- (4) Remove the T main brake assembly and the S main brake assembly. (Refer to item 1-20.)
- (5) Remove the screw (1) and remove the subchassis assembly.
- (6) When reassembling the sub chassis, use the same procedures shown above in reverse order.

Note: When reassembling, make sure the CR slider is properly engaged with the CR assembly. (Figure 1-21-2)

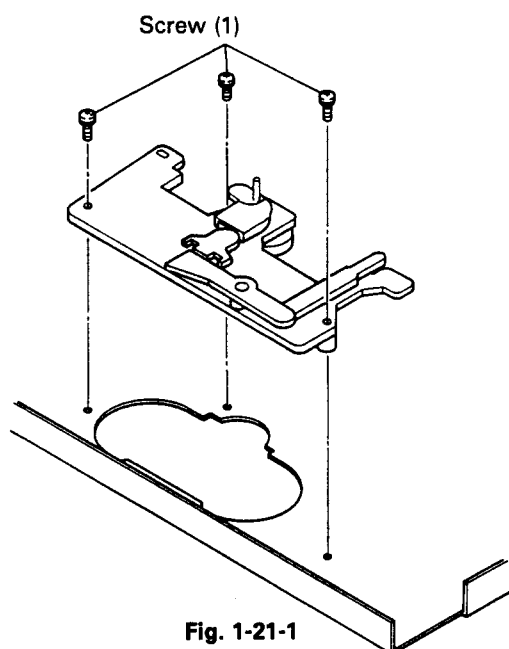


Fig. 1-21-1

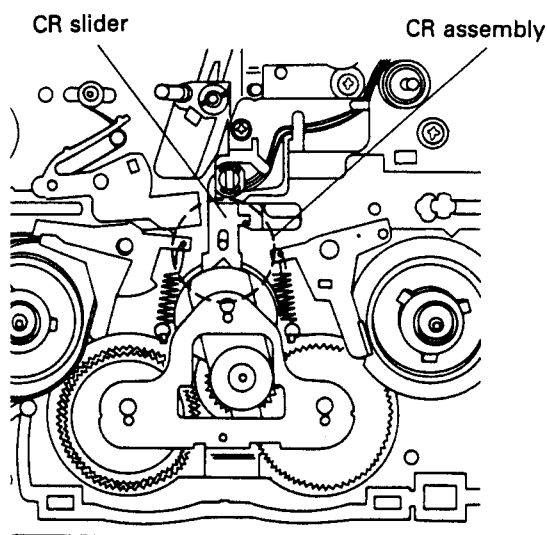


Fig. 1-21-2

1-22. REPLACEMENT OF TENSION REGULATION BAND ASSEMBLY (Figure 1-22)

- (1) Remove screw (1).
- (2) Remove the band brake assembly from the tension regulation gear arm assembly.
- (3) When reassembling the band brake assembly, use the same procedures shown above in reverse order.

Note: When replacing the tension regulation band, do not apply excessive force to the band. If applied, the band will be deformed. Thread the band brake assembly as shown in Figure 1-23-2. Always perform the tension regulation arm position adjustment described under item 1-23.

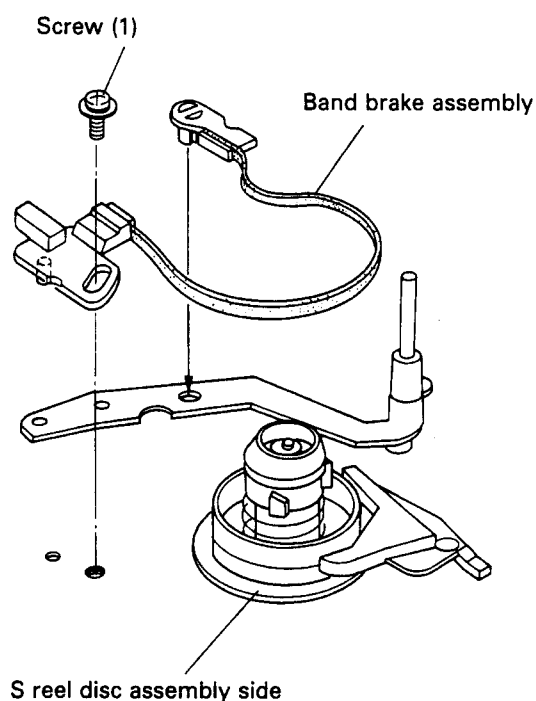


Fig. 1-22

1-23. TENSION REGULATION ARM POSITION ADJUSTMENT (Figure 1-23)

- (1) Set the unit to the PLAY mode with a cassette unloaded.
- (2) Mount and fix the tension regulation arm assembly with screw (1) so that its end just overlaps D-form cutout provided on the chassis as shown in Figure 1-23-1.
- (3) Make sure the band brake assembly is threaded as shown in Figure 1-23-2. Particularly paying attention to the part "A".

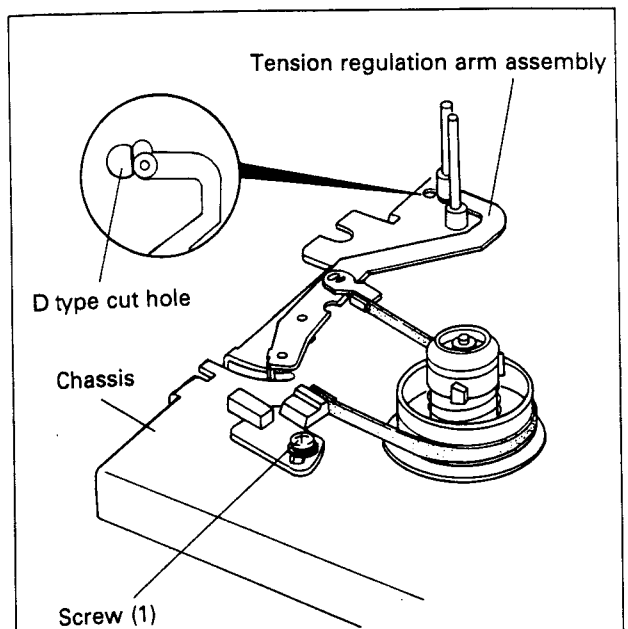


Fig. 1-23-1

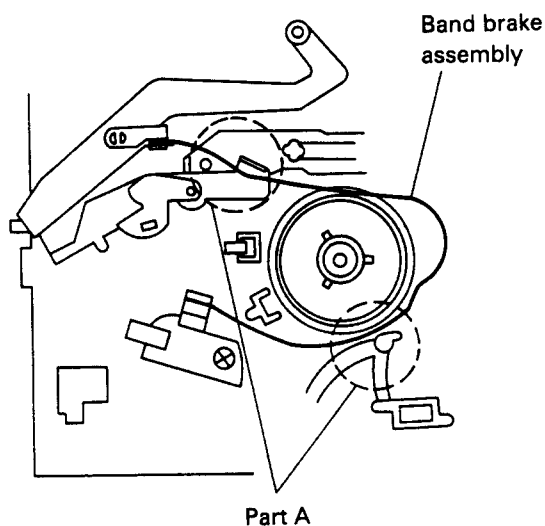


Fig. 1-23-2

1-24. REPLACEMENT OF TENSION REGULATION ARM ASSEMBLY (Figure 1-24)

- (1) Remove screw (1), and remove the band brake assembly from the tension regulation gear assembly.
- (2) Remove the SOL link lever. (Refer to item 1-18.)
- (3) Remove the brake SOL assembly. (Refer to item 1-19.)

- (4) Remove the tension regulation spring.
- (5) Remove the tension regulation arm assembly.
- (6) When mounting the tension gear arm assembly, use the same procedures shown above in reverse order.

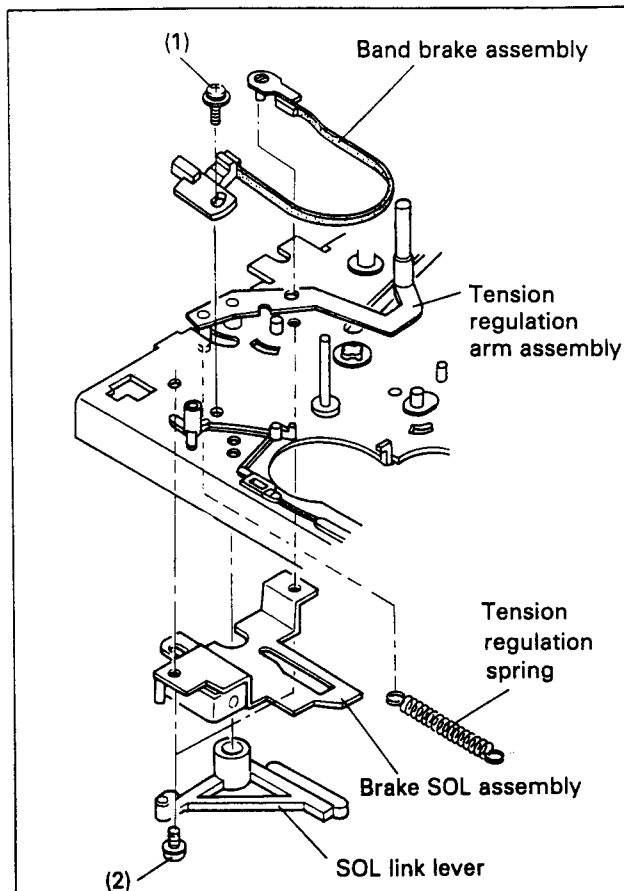


Fig. 1-24-1

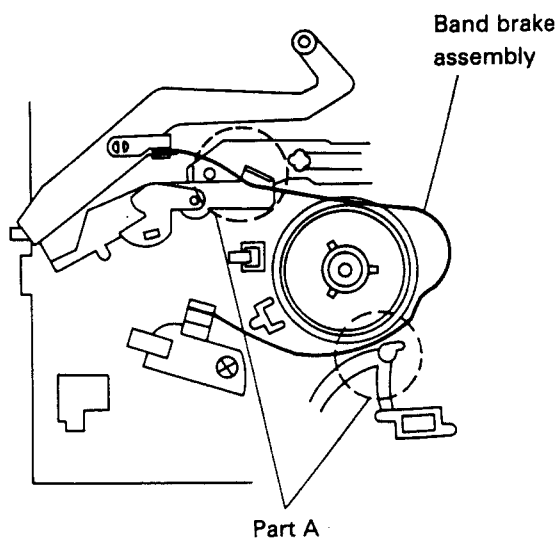
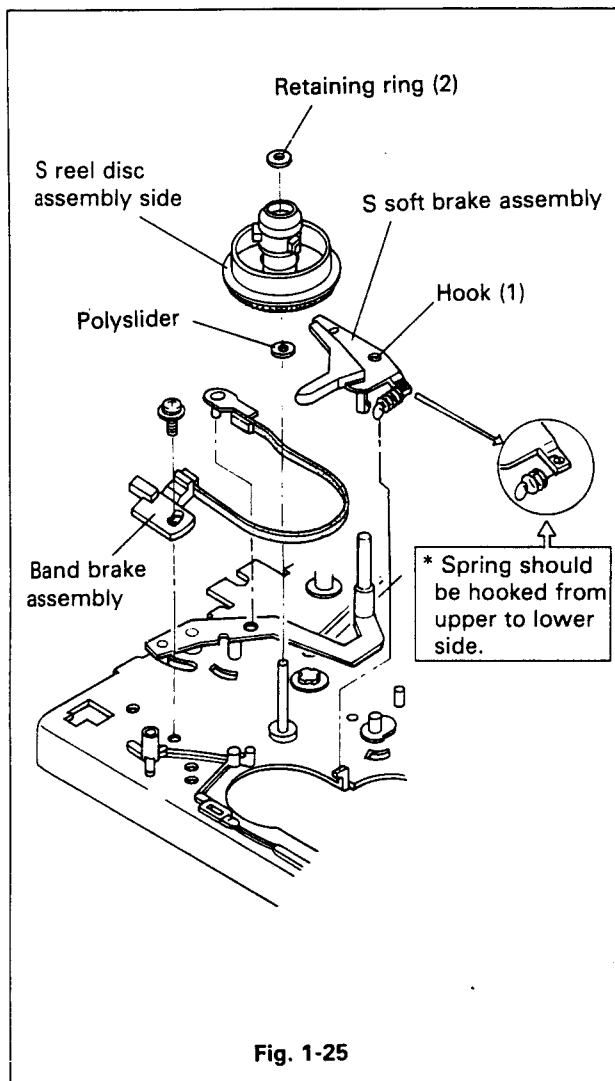


Fig. 1-24-2

1-25. REPLACEMENT OF S REEL TABLE ASSEMBLY (Figure 1-25)

- (1) Remove the S soft brake assembly from the hook (1) and then remove it upward.
- (2) Remove the tension regulation band assembly.
- (3) Remove retaining ring (2) and remove the S reel table assembly.
- (4) When mounting a new S reel table assembly, use the same procedures shown above in reverse order.

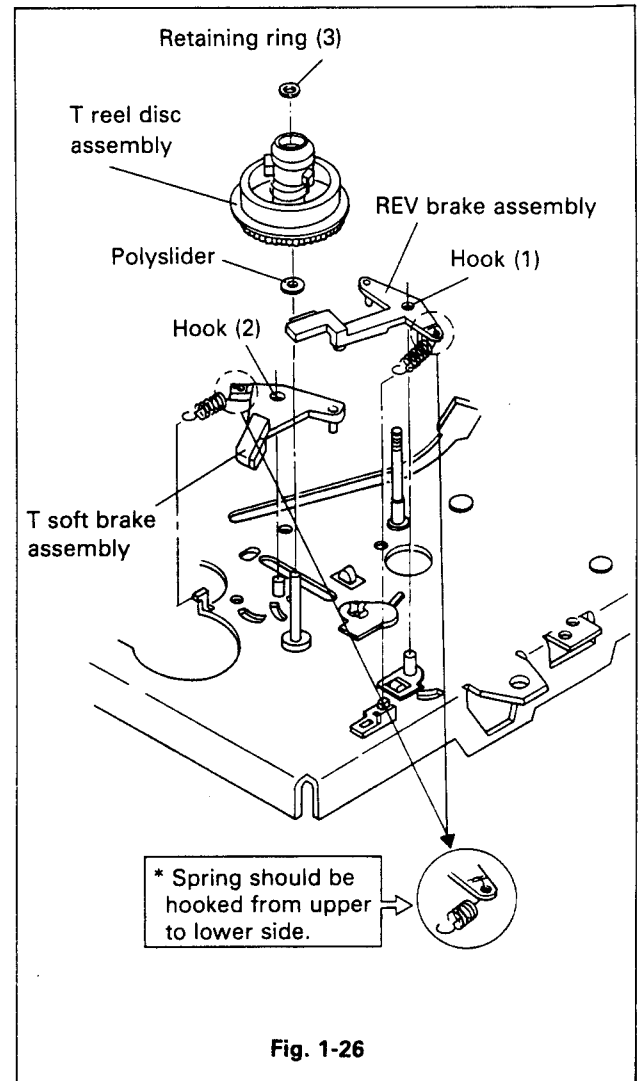
Note: A polyslider of 0.13 thickness is used to adjust reel table height, so in certain units no polyslider will be used.



1-26. REPLACEMENT OF T REEL TABLE ASSEMBLY (Figure 1-26)

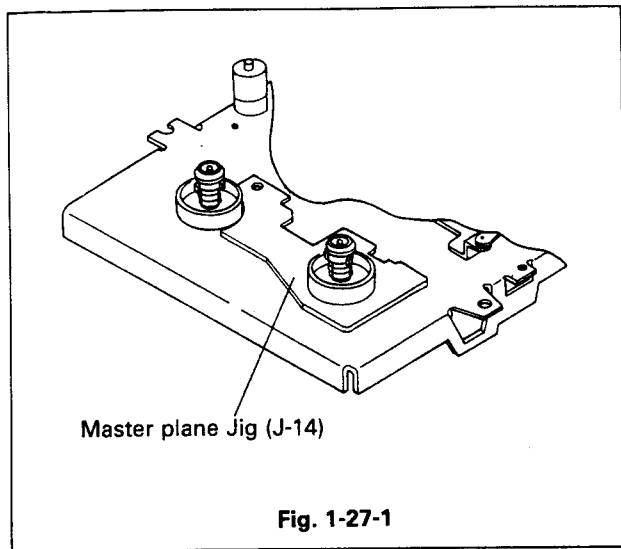
- (1) Remove the REV brake assembly from the hook (1) and then remove it upward.
- (2) Remove the T soft brake assembly from the hook (2) and then remove it upward.
- (3) Remove the stop ring (3) and then the T reel table assembly.
- (4) When mounting a new T reel table assembly, use the same procedures shown above in reverse order.

Note: The polyslider of 0.13 thickness is used to adjust reel table height, so no polyslider will be used in certain units.



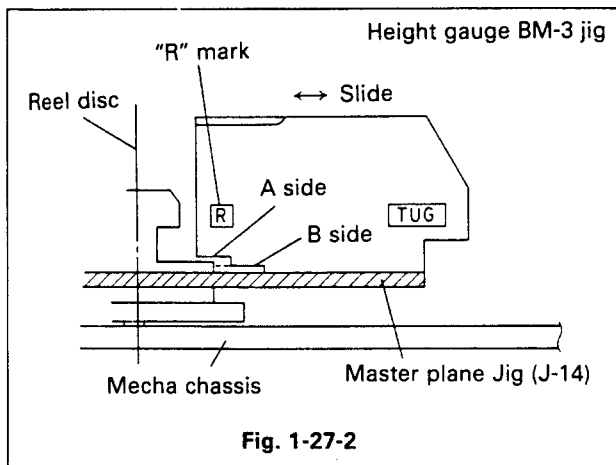
1-27. S AND T REEL TABLE ASSEMBLY ADJUSTMENTS (Figure 1-27)

- (1) Place the master plane Jig (J-14) on the deck as shown in (Figure 1-27-1) to check or to adjust the S and T reel table height.



- (2) Place the height gauge BM-3 jig (J-15) on the master plane jig and slide it in the directions shown by arrows in Figure 1-27-1 to make sure the upper plane of the reel table assembly passes under the "A" plane of the jig and does not pass under the "B" plane.

Note: When performing S reel table height check, place the height gauge Jig BM-3 (J-15) in the master plane Jig (J-14) so that its mark "R" faces as illustrated in Figure 1-27-2. When performing T reel table height check, place the height gauge in the same way.

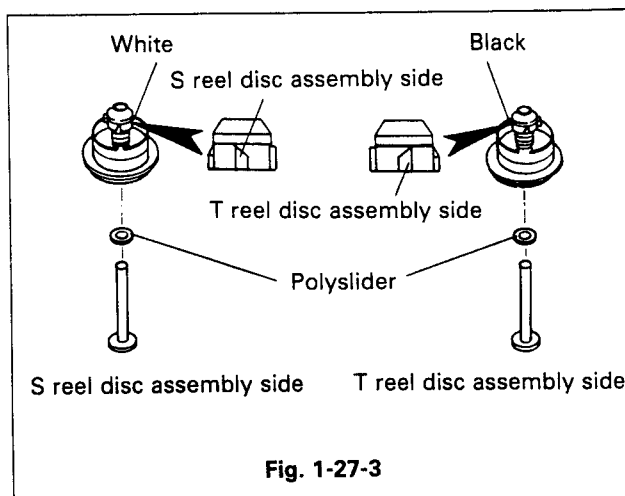


- (3) If the reel table height is outside the limit, adjust the height by replacing the polyslider with a new one having different thickness. (Figure 1-27-3)

Part number for adjustment polysliders:

016-62-8731 : 0.5mm thickness

016-28-8001 : 0.13mm thickness



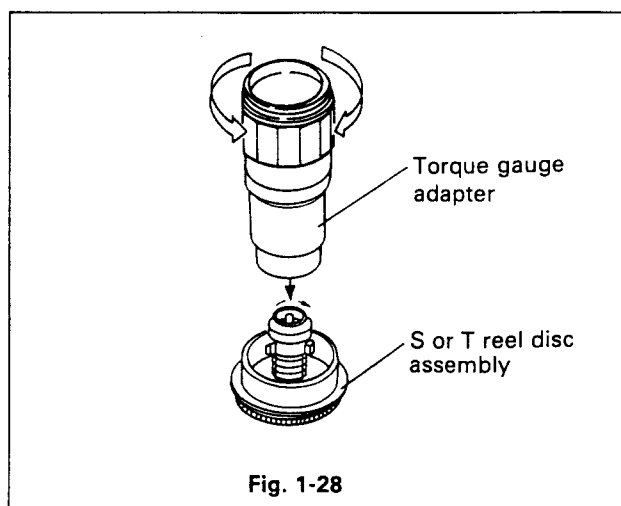
1-28. MEASUREMENT AND CONFIRMATION OF FWD WINDING TORQUE (Figure 1-28)

- (1) Set the unit to the FWD mode.
- (2) Place a torque gauge on the T reel table assembly and measure the torque (J-10, J-11).
- (3) FWD torque specification: $85 \pm 20\text{g.cm}$
- (4) FF, REW torque specification: Higher than 400g.cm
- (5) REV torque specification: $180 \pm 30\text{g.cm}$

1-29. MEASUREMENT AND CONFIRMATION OF BRAKE TORQUE (Figures 1-28, 1-29)

When S and T main brake assemblies are replaced, perform following measurements:

- (1) Remove the cassette housing and connect TP101 and TP102 on the system control/servo/tuner circuit board with a clip. (Refer to item 1-5).



(2) Set the unit to the STOP mode and unplug the AC cord.

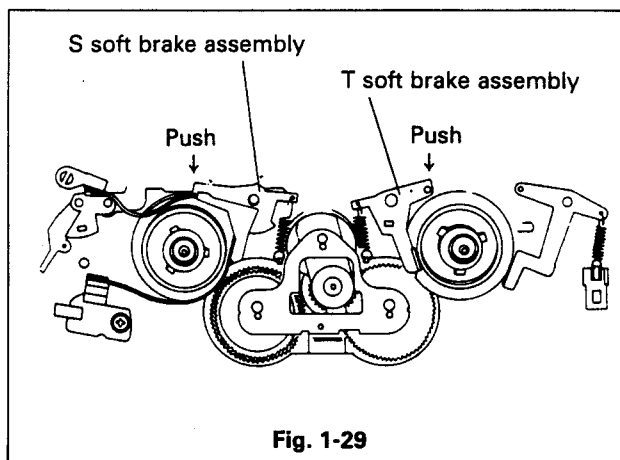
(3) **S main brake torque measurement**

Push the S soft brake slightly in direction shown by the arrow until the band brake is released from the reel table.

Place the torque gauge on the S reel table assembly. Hold the gauge lightly, turn it clockwise until the dial scale just moves with the dial pointer. Read the torque at this condition, it should be higher than 70g.cm.

(4) **T main brake torque measurement**

In the same way push the T soft brake slightly in the direction shown by the arrow. Place the torque gauge on the T reel table assembly. Turn the gauge counterclockwise until the dial scale just moves with the pointer. Read the torque at that condition, it should be higher than 70g.cm.



Note: If the measurement value deviates excessively from the limit values, check springs, etc.

2. CHECKING AND ADJUSTING TAPE PATH

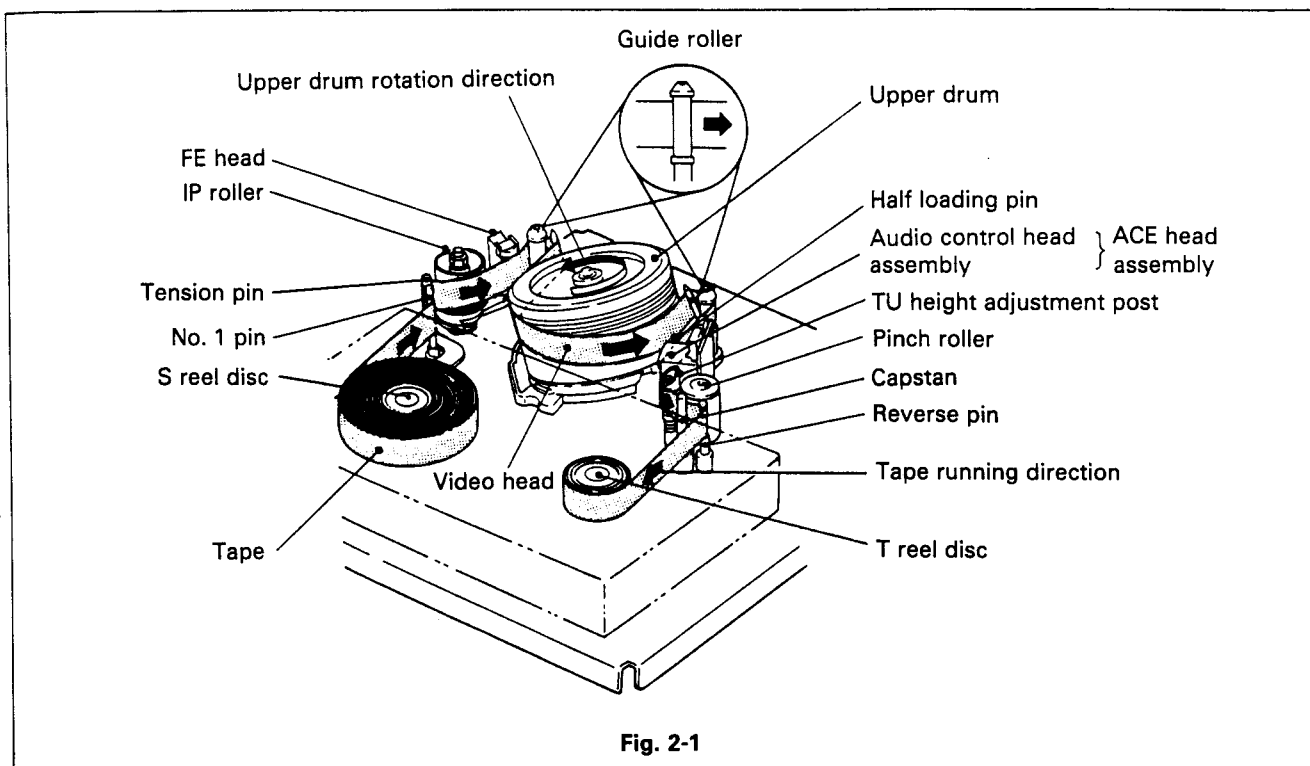
The tape path mechanism has been completely adjusted, so no additional adjustment is necessary, except some parts associated with the tape path mechanism have been replaced or worn out for long period of use.

Tape is wound inside a cassette in passing through pin No.1, tension pin, IP roller, and routine shown by arrows in Fig. 2-1. The IP roller functions to absorb fine vibration being caused along running direction of the tape and prevents jitter of picture and wow and flutter for audio signals.

The reverse pin works to limit height of the tape before it outputs from the T reel table and enters the capstan (pinch roller) in the REV mode where the tape runs in reverse direction.

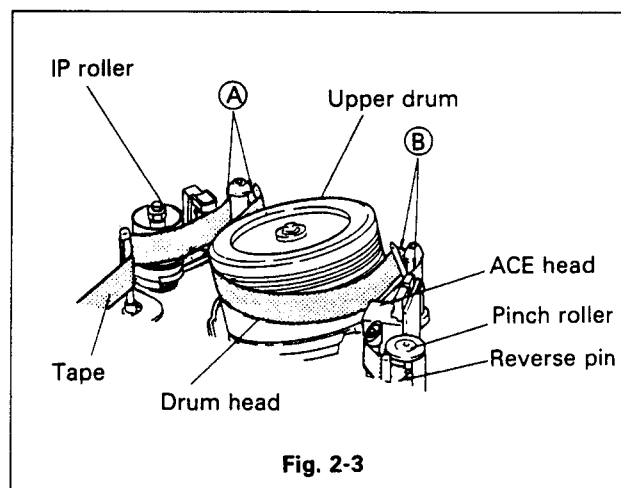
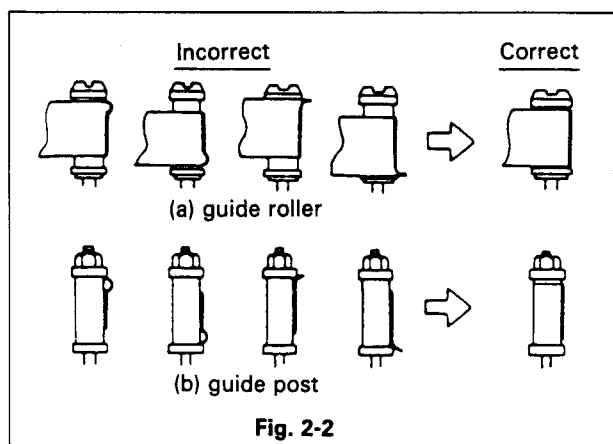
2-1. TAPE PATH MECHANISM (Figure 2-1)

In the VHF tape path system, an upper drum with video heads rotates and tape is wrapped around a slanted drum in "M" form. To wrap the tape around the drum slanted, a pair of slant posts provided at left and right sides of the drum limits running status of the tape. Moreover, a pair of guide rollers limits running height of the tape.



2-2. TAPE RUNNING PATH CHECK

- (1) A cassette tape (T-120) is used.
- (2) Clean surfaces of tape transport mechanism (tape guide, tape running surface of the drum, capstan shaft, pinch roller, ACE, FE heads, etc.) with a cleaning cloth soaked in cleaning solution (isopropyl alcohol).
- (3) Load a cassette tape into the unit to check following points.
- (4) Repeat the PLAY and the STOP mode of operations several times and make sure the unit works as expected without any abnormality.
- (5) Operate the unit in the PLAY, CUE, and REV mode and observe running status of the tape at the S guide roller, S guide post, T guide roller, T guide post, reverse pin whether the tape runs smoothly without wrinkling. (Figure 2-2) If tape wrinkling is found, adjust as shown in item 2-3.
- (6) Also make sure there is no waving of the tape when it runs at the parts ① and ② in each mode of PLAY, CUE and REV.
- (7) Repeat the REV and the CUE mode alternately in several times and make sure that the tape does not move up and down at the ACE head.



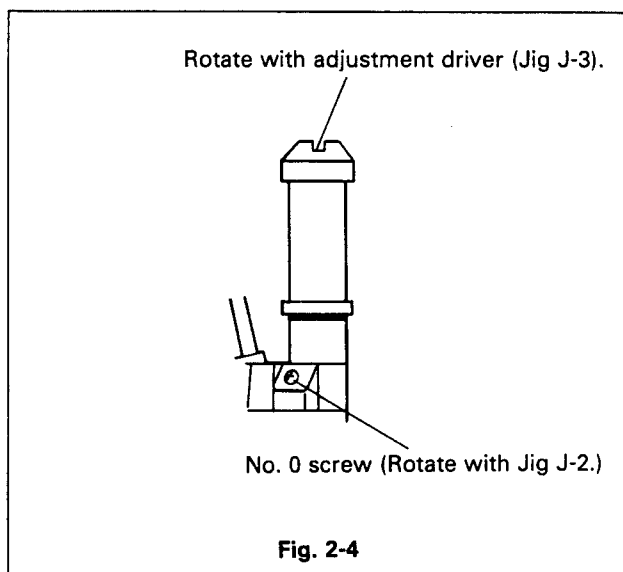
2-3. TAPE TRANSPORT SYSTEM ADJUSTMENT

Perform the tape transport system adjustment only when abnormality is found when the tape is running in Figure 2-2.

Note: If the tape transport system adjustment has been made, always perform the interchangeability adjustment.

2-3-1. Guide roller height adjustment (Vertical pole height adjustment)

- (1) Loosen No. 0 screws provided at each base of the S guide roller and the T guide roller until the guide roller can be rotated easily with the adjustment driver.
- (2) Load a cassette tape and set the unit to the PLAY mode.
- (3) Turn the supply guide roller with the adjustment driver (J-3) until the tape wrinkling disappears at upper and lower flanges of the roller.
- (4) In the same way adjust the T guide roller.

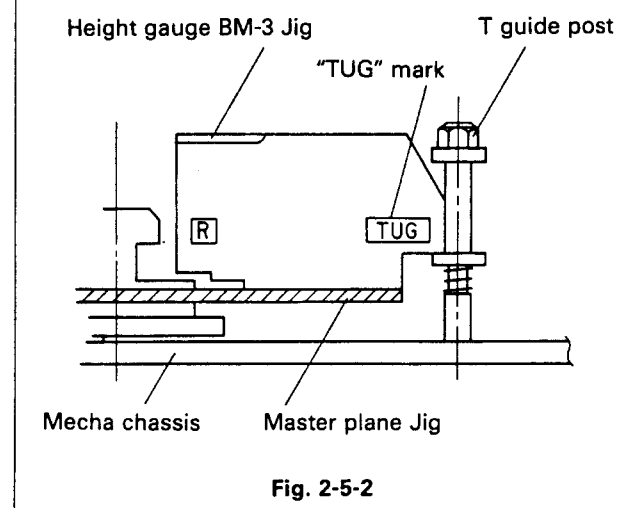
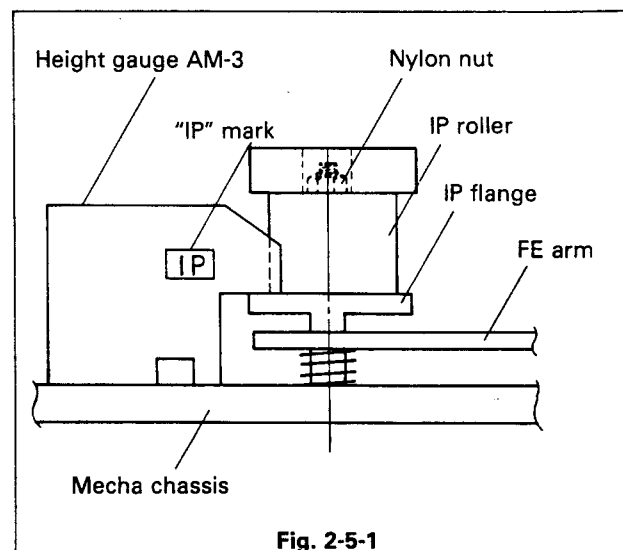


2-3-2. Guide post height adjustment

Note: When performing the T guide post height adjustment, remove the G.P. cap.

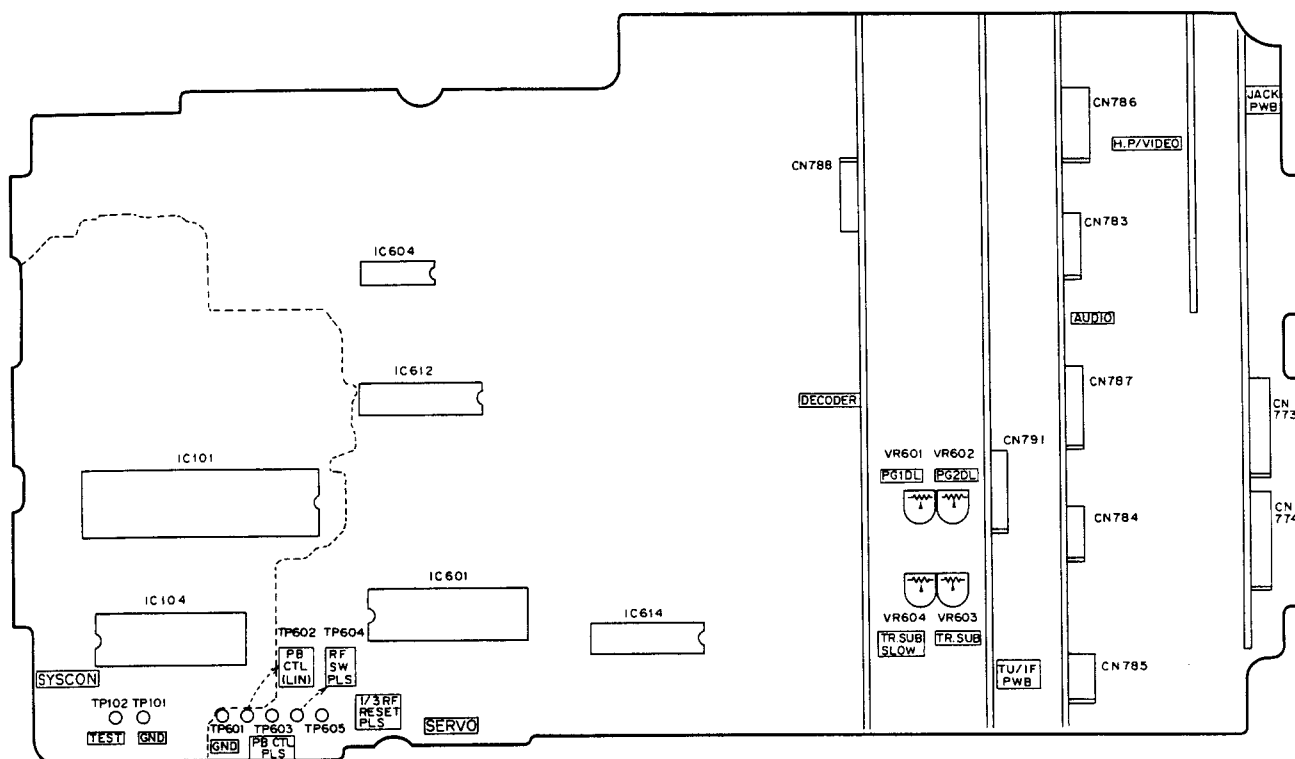
[A] IP roller and T guide post height adjustment

- (1) Place the height gauge AM-3 Jig (J-13) on the chassis as shown in Figure 2-5-1, and adjust lower plane height of the IP flange by turning the nylon nut.
- (2) When adjusting height of the T guide post, place the master plane Jig (J-14) on the chassis, and the height gauge BM-3 Jig (J-15) on the plane Jig as shown in Figure 2-5-2 (The TUG mark should be faced at right.) Adjust the upper plane height of the lower flange with the nylon nut.



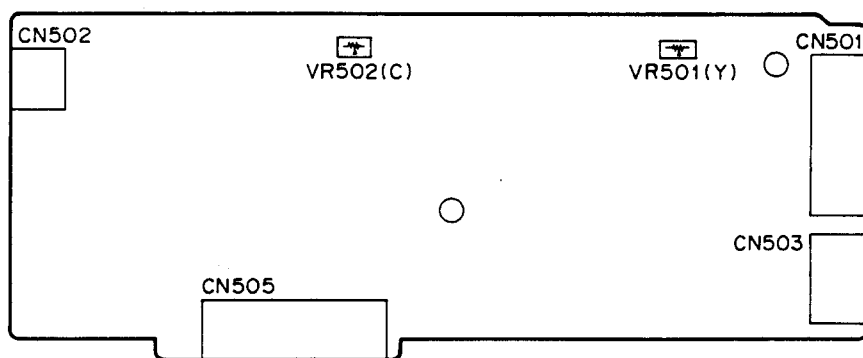
3. INTERCOMPATIBILITY ADJUSTMENTS

Because these adjustments have a significant effect on the picture quality in the respective modes, as well as affecting the degree of tape intercompatibility, be sure to perform the following procedures very carefully and thoroughly.



SERVO

* This circuit board is viewed from component side.



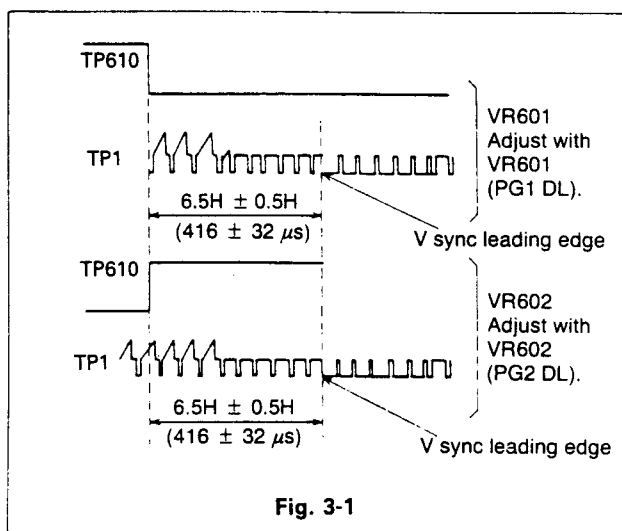
PREAMP

* This circuit board is viewed from component side.

3-1. FM WAVEFORM CHECK

3-1-1. Check 1 (Playback switching point)

- (1) Play back the alignment tape (MH-2).
- (2) Connect oscilloscope's CH1 to test pin TP610 on the S/S circuit board.
Connect oscilloscope's CH2 to test pin TP901 on the jack terminal circuit board.
- (3) Make sure time interval of $6.5H \pm 0.5H$ is obtained between the V sync front porch and RF switching pulse.
- (4) If the time interval is not $6.5H \pm 0.5H$, adjust V601 and V602 on the S/S circuit board to obtain the specified value.



3-1-2. Check 2 (FM waveform check)

- (1) Connect the oscilloscope's CH1 to TP501 on the preamplifier circuit board. Also connect the scope's trigger terminal to TP604 on the S/S circuit board or TP901 on the jack terminal board.
- (2) Play back the alignment tape (MH-2).
- (3) Adjust the tracking control until maximum FM waveform is obtained.
- (4) Read the maximum value "a" in Figure 3-2. If the waveform is of sawtooth, read the amplitude at the most flat part of the waveform.
- (5) Read the minimum value "b" (except values corresponding to the drum entrance and exit).

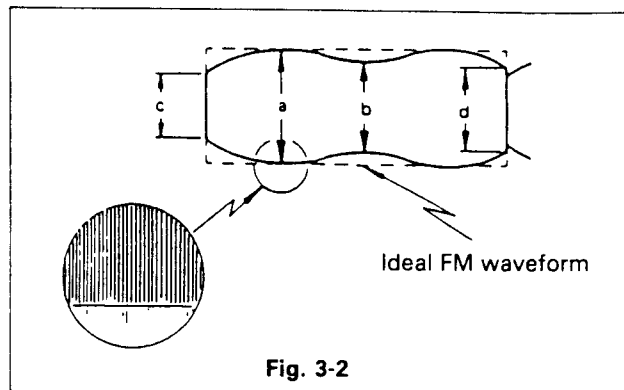
$$\frac{b}{a} \geq 0.8$$

- (6) In the same way, read the value "c" corresponding to drum entrance and the value "d" corresponding to the drum exit.

Make sure each value of the a, b, c, d are within the specified value.

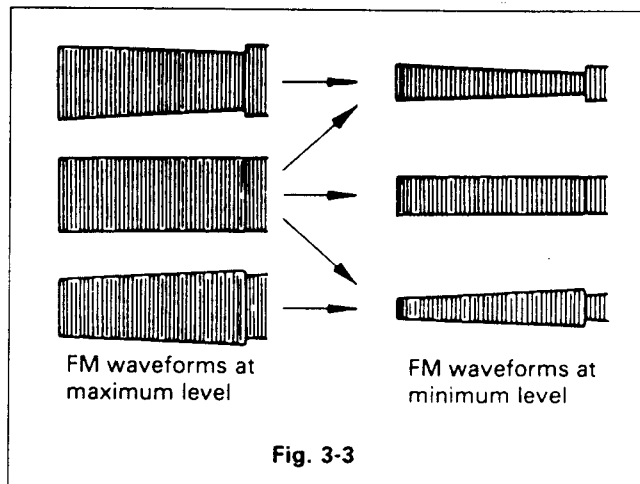
$$\frac{c}{a} \geq 0.7 \quad \frac{d}{a} \geq 0.7$$

- Note:**
1. Read minimum values of b, c, and d.
 2. If the values are within the specified limits, proceed to next check 3-1-3.
 3. If abnormality is found, perform the FM waveform adjustment under item 3-2.

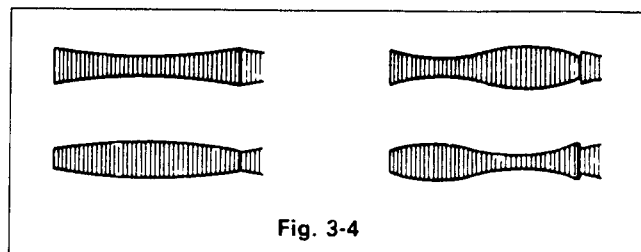


3-1-3. Check 3

- (1) Connect the oscilloscope as in the "Check 2". Observe the scope display while turning the tracking control knob. If the waveform on the scope display varies linearly as shown in Figure 3-3 as the tracking control is varied, proceed to "3-4 ACE head height and azimuth adjustments".



- (2) If the scope display shows waveform as shown in Figure 3-4, fine adjustment given in item 3-3 should be made.



3-2. FM WAVEFORM COARSE ADJUSTMENT

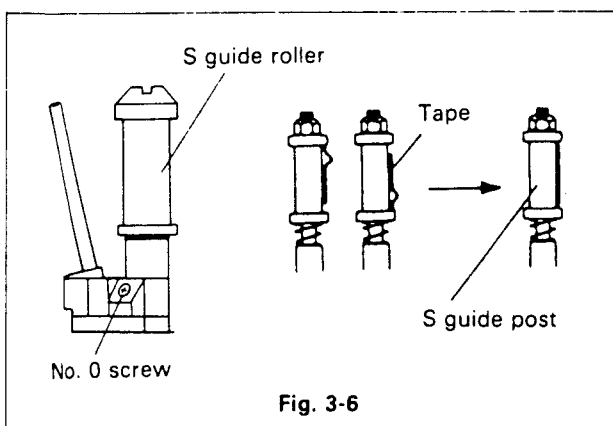
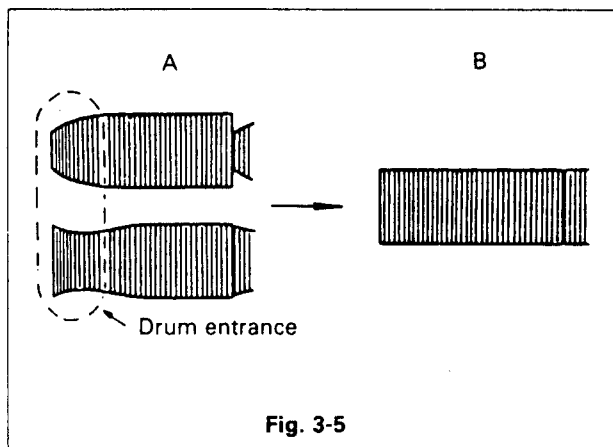
- (1) Loosen No. 0 screws at the base of the supply and take-up guide rollers with a (+) screw driver until the guide rollers can rotate for the adjustment.
- (2) Connect the oscilloscope's CH1 to TP501 on the preamplifier circuit board and the scope's CH2 to TP602 on the S/S circuit board or TP901 on the jack terminal board (the signal is used as an external trigger signal.)
- (3) Play back the alignment tape (MH-2).

3-2-1. Drum entrance side

- (1) Adjust the tracking control until maximum amplitude of the FM waveform is obtained while turning the tracking control knob.
- (2) If the waveforms as shown in Figure 3-5 (A) are observed, adjust the supply guide roller to obtain the flat waveform as shown in B.

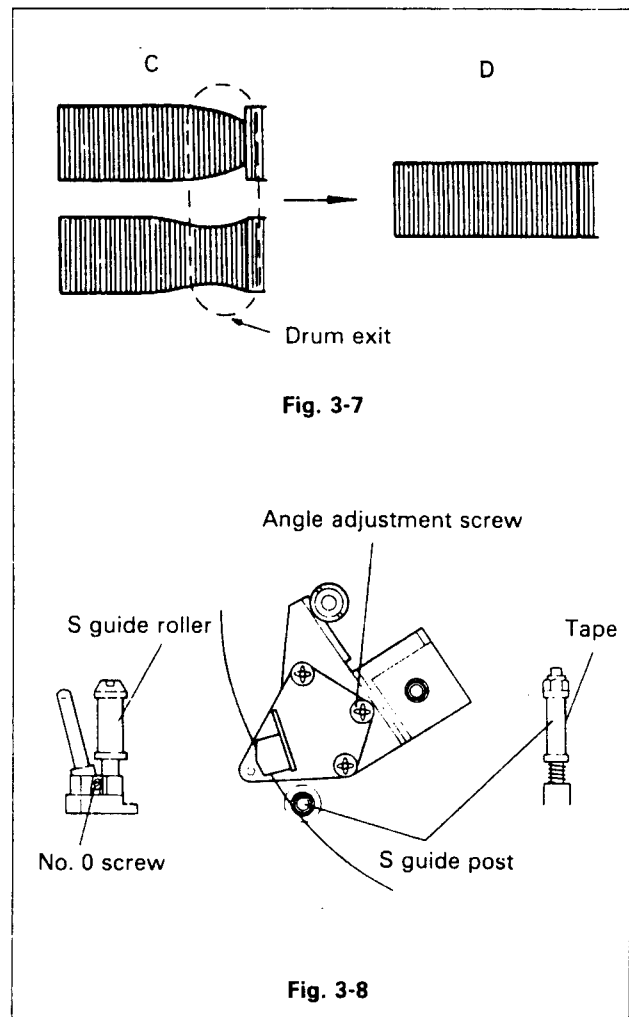
Note: 1. If the guide roller rotate freely, slightly tighten the No.0 screw to the degree which allows adjustment by the Jig J-3). (Refer to Figure 3-6.)

2. Adjust the guide roller little by little to prevent the alignment tape (MH-2) from damage.
3. Moreover, make sure tape wrinkling does not occur at the guide poles and the leading edge of the drum while observing the waveforms.



3-2-2 Drum exit side

- (1) In the same way as conducted in the "Drum entrance side", adjust the waveform by turning the take-up guide roller. If waveforms as shown in Figure 3-7 are obtained, adjust the take-up guide roller until the flat response is obtained as shown in D.



3-3. FINE ADJUSTMENT FOR INTER-CHANGEABILITY

- (1) Connect the oscilloscope to the test pin TP501 on the preamplifier circuit board. Connect the oscilloscope's external trigger terminal to TP604 on the S/S circuit board the alignment tape (MH-2). Adjust the tracking control knob for minimum FM output level while observing the the scope display.
- (2) If the scope display shows waveforms shown in Figure 3-9, C and D, minimize the FM waveform and carefully adjust T and S guide rollers until a waveform shown in Figure 3-9 E, F, or G is obtained.

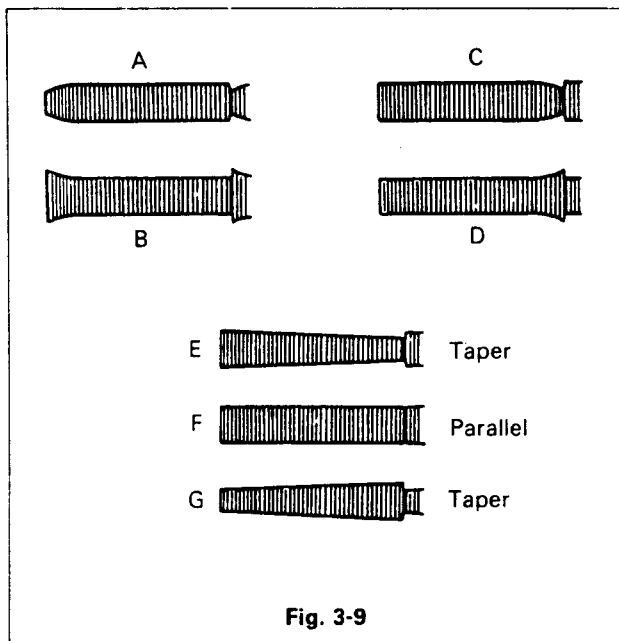


Fig. 3-9

- (5) After completion of the adjustments above, make sure the tape transport mechanism works correctly, and then carefully tighten the No.0 screws.

3-4. ACE HEAD HEIGHT AND AZIMUTH ADJUSTMENT

Improper height adjustment of the audio and control heads lowers SN, when a recorded tape is reproduced. (Refer to Figure 3-10.)

- (1) Connect the oscilloscope's CH1 to the Audio output terminals on the rear panel.
- (2) Play back a 7kHz audio signal recorded in the alignment tape (MH-2).
- (3) Observe the audio signal waveform on the scope display and adjust the azimuth adjusting screw B for maximum output level.
- (4) Adjust the height adjusting screw A as shown in Figure 3-10 for maximum output level.

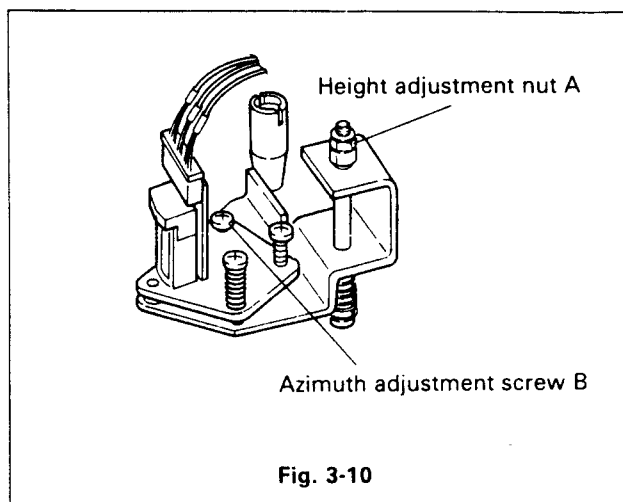


Fig. 3-10

3-5. CTL POSITION ADJUSTMENT

- (A) Sub-tracking adjustment
 - (1) Connect the oscilloscope's CH1 to the test pin TP610 on the S/S circuit board and the CH2 to the test pin TP603 on the same circuit board.
 - (2) Run the alignment tape (MH-2).
 - (3) Adjust VR603 until rising edge of V sync pulse matches to rising edge of the RF switching pulse as shown in Figure 3-11.

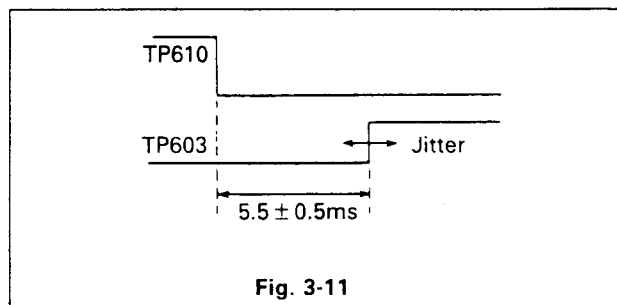


Fig. 3-11

[B] ACE head position adjustment

- (1) Connect the oscilloscope's CH1 to the test pin TP501 on the preamplifier circuit board and the CH2 to the test pin TP610 on the S/S circuit board.

- (2) Play back the alignment tape (MH-2) and adjust the taper pin until maximum amplitude of the FM waveform is obtained with the tracking control set at its center position. (Refer to Figure 3-10.)

Next, play back the alignment tape (MH-2) and make sure the FM waveform shows maximum amplitude at the center of the tracking control knob.

3-6. FINAL CHECK

- (1) Connect the oscilloscope's CH1 to the test pin TP610 on the S/S circuit board and the CH2 to the test pin TP1 on the jack terminal board.

- (2) Make sure REC timing is set at $6.5H \pm 1H$. (Figure 3-12)

- (3) Record a monochrome signal or a stair step signal on a blank tape.

- (4) Connect the oscilloscope's CH1 to the test pin TP501 on the preamplifier and the CH2 to TP610.

Play back the tape just recorded and make sure evenness (a/b) of the waveform is higher than 0.7. (Figure 3-12)

- (5) After completion of the checks and adjustments shown above, make sure the tape is being transported normally.

Apply screw lock paint on the azimuth adjusting screw and the taper pin.

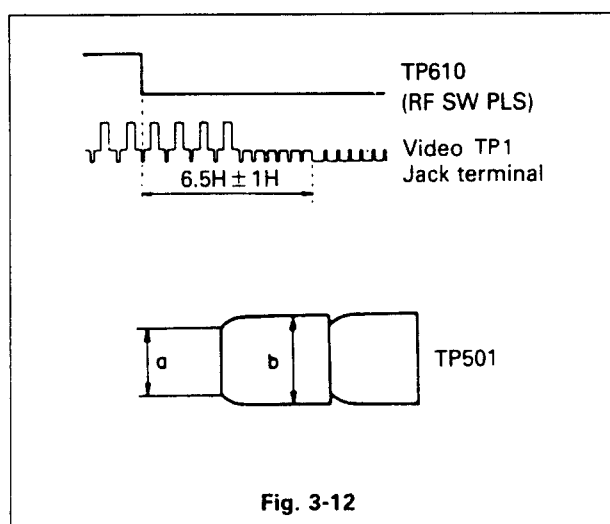


Fig. 3-12

4. ELECTRICAL ADJUSTMENTS

4-1. PREPARATION

The electrical adjustments should be made when some mechanical parts such as the video heads, etc. are replaced because of damage or worn out. When electrical failure occurs, always locate cause of the trouble using measurement equipments, then proceed to repairing works and adjustments.

4-1-1. Measurement equipment and Jigs

- | | |
|-------------------------------|--|
| ① Color TV monitor (color TV) | ⑤ Audio signal generator |
| ② Oscilloscope | ④ Alignment tape (MH-2), and other general tools |
| ③ Color bar generator | ⑦ Cassette tape (E-60, E-120) |
| ④ Frequency counter | ⑧ Digital multimeter or circuit tester |

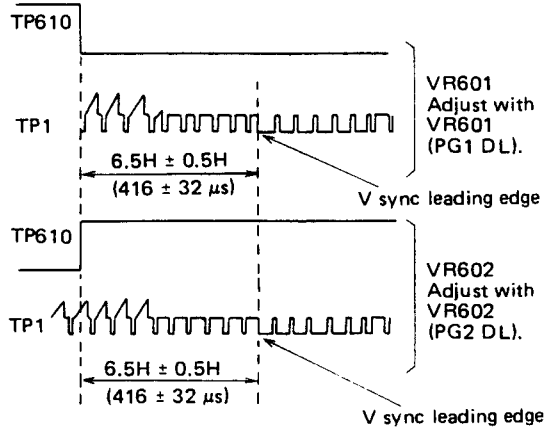
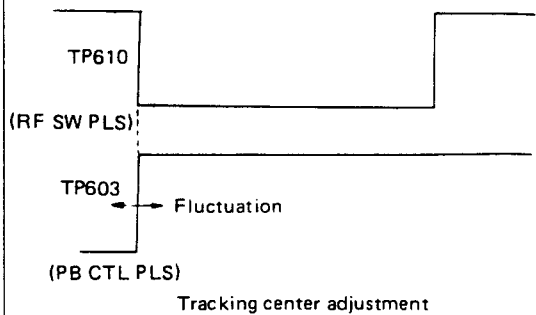
4-1-2. Alignment tape contents

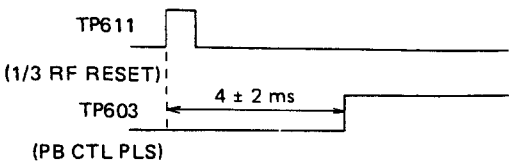
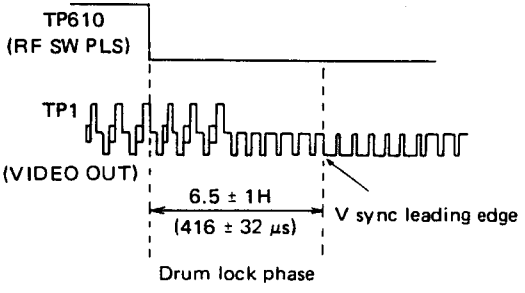
- MH-2

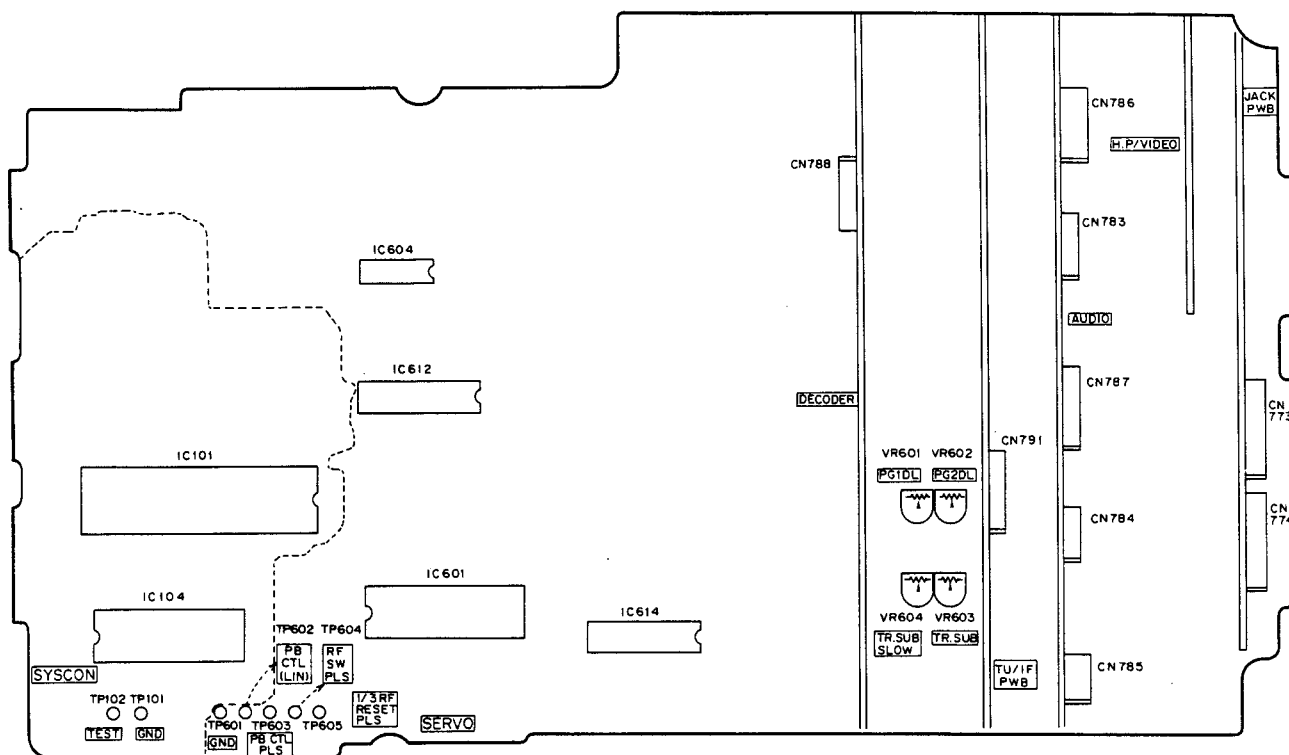
No.	Playback Time	Video Signal	Audio Signal	Applications
1	10 minutes	Stair-step	6 kHz	<ul style="list-style-type: none">● Interchangeability checks and adjustments● Drum servo circuit checks and adjustments● Audio head azimuth adjustment
2	5 minutes	(none)	3 kHz	<ul style="list-style-type: none">● Tape speed check● Wow and flutter check
3	10 minutes	Color bar	1 kHz	<ul style="list-style-type: none">● Video signal playback circuit checks and adjustments● Audio signal playback circuit checks and adjustments
4	3 minutes	RF sweep	(none)	<ul style="list-style-type: none">● Video head resonance (Q) adjustments● Marker: 2MHz, 4MHz, 5MHz (not used)

Table 4-1 MH-2 contents

4-2. SERVO CIRCUIT (S/S board)

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Adjustment & Confirmation
1	Video switching point	TP610 (RF SW PLS) TP1 [on jack terminal] (VIDEO OUTPUT)	VR601 (PG1 DL) VR602 (PG2 DL)	MH-2 P.B.	<ol style="list-style-type: none"> 1. Connect an oscilloscope to TP610 and TP1. 2. Play back the alignment tape specified at left, watch the monitor screen, and adjust the tracking VR to the best tracking condition. 3. Adjust VR601 and VR602 so that the phase relationship of RF SW PLS with the reproduced video signals will be as shown below.  <p>TP610</p> <p>TP1</p> <p>$6.5H \pm 0.5H$ ($416 \pm 32 \mu s$)</p> <p>V sync leading edge</p> <p>VR601 Adjust with VR601 (PG1 DL).</p> <p>TP610</p> <p>TP1</p> <p>$6.5H \pm 0.5H$ ($416 \pm 32 \mu s$)</p> <p>V sync leading edge</p> <p>VR602 Adjust with VR602 (PG2 DL).</p>
2	Tracking SUB VR	TP610 (RF SW PLS) TP603 (PB CTL PLS)	VR603 (TRACKING SUB)	MH-2 P.B.	<ol style="list-style-type: none"> 1. Connect an oscilloscope to TP601 and TP603. 2. Press the tracking pushbutton to the center click position. 3. Play pack MH-2, and adjust VR603 until the waveform has the phase relationship shown below. (Triggering TP610 causes the waveform at TP603 to fluctuate. Adjust to the center of the wave.)  <p>TP610</p> <p>(RF SW PLS)</p> <p>TP603</p> <p>(PB CTL PLS)</p> <p>Fluctuation</p> <p>Tracking center adjustment</p>

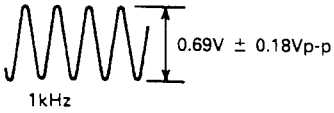
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Adjustment & Confirmation
3	Slow SUB tracking VR	TP611 (1/3 RF RESET PLS) TP603 (PB CTL PLS)	VR604 (TR SUB SLOW)	MH-2 P.B.	<ol style="list-style-type: none"> 1. Connect TP611 and TP603 to an oscilloscope. 2. Press the tracking pushbutton to the center click position. 3. Play back MH-2, and adjust VR604 until the waveform has the phase relationship shown below. 
4	Drum lock phase (REC TIMING)	TP610 (RF SW PLS) TP1 [on jack terminal] (VIDEO OUTPUT)	Check	<ul style="list-style-type: none"> • Color bar • Standard REC mode 	<ol style="list-style-type: none"> 1. Connect an oscilloscope to TP610 and TP1. 2. Select the standard REC mode, and check the waveforms at TP610 and TP1 that their phase relationship is as shown below. <p>Note: If a damaged tape is played back, the lock phase will show much deviation during an operation check. If tape damage is slight, check that the center of lock phase deviation meets the relationship shown below.</p> 

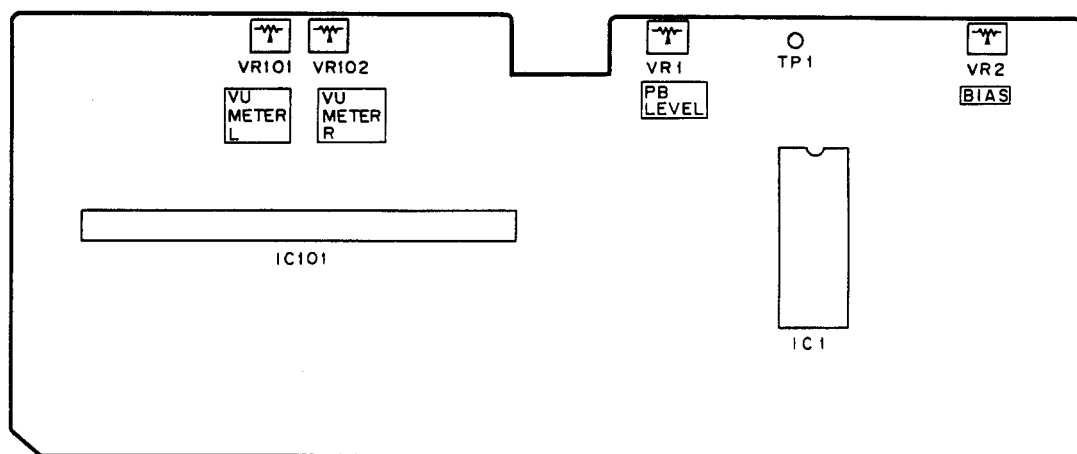


SERVO

* This circuit board is viewed from component side.

4-3. AUDIO CIRCUIT [Normal] (Audio board)

No.	Item	Check Point	Adjustment Parts	Signal & Mode	Description and Waveform
1	P.B.level	Audio output terminals	VR1 (P.B. LEVEL)	<ul style="list-style-type: none"> ● Alignment tape MH-2 ● P.B. mode 	<p>1. Adjust VR1 so that the audio output level shows $-10\text{dB} \pm 1\text{dB}$. (When using oscilloscope, the amplitude of the output should be $0.69\text{V} \pm 0.18\text{V}_{\text{p-p}}$.)</p>  <p>1kHz Audio output</p>
2	Head bias	TP1, TP2 Audio circuit board	VR2 (Bias level)	<ul style="list-style-type: none"> ● No input signal ● SP (2H) REC mode 	<p>1. Connect millivoltmeter across TP1 (+) and TP2 (−) on the audio circuit board. Adjust VR2 until the voltmeter shows $3.3 \pm 0.1\text{mV}_{\text{rms}}$. (S-tape should be used.)</p>



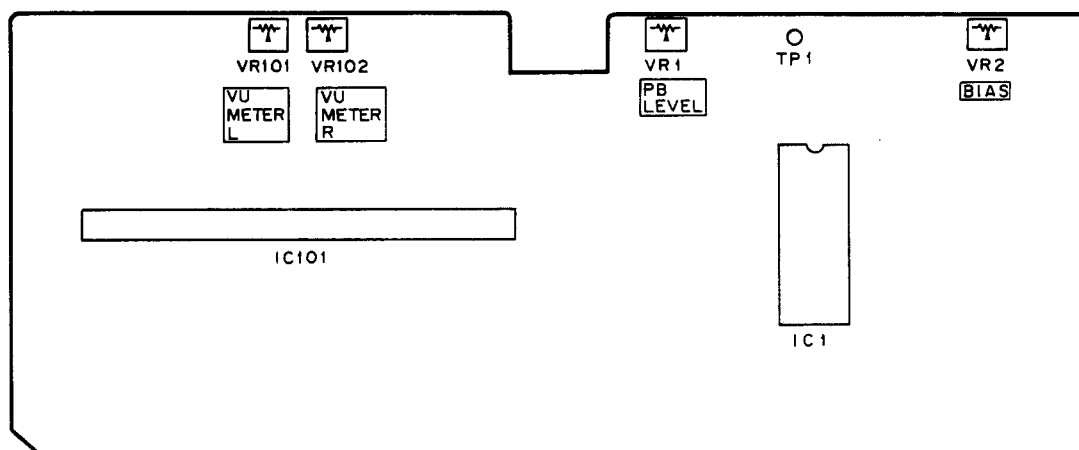
AUDIO * This circuit board is viewed from component side.

4-4. AUDIO CIRCUIT [Hi-Fi audio] (Audio board)

Note:

Be sure to confirm the switch positions of the front panel are as follows:
Input Select switch is set to Line and Output Select switch is set to Stereo.

No.	Item	Check Point	Adjustment Parts	Signal & Mode	Description and Waveform
1	VU Meter	AUDIO Output Terminal	VR101 (Lch) VR102 (Rch)	<ul style="list-style-type: none"> ● LINE IN → 400 Hz —8dBs ● E-E 	<ul style="list-style-type: none"> ● Input 400 Hz, —8 dBs and activate E-E mode. ● Adjust so that LINE OUT is —8 dBs. ● Then adjust VR101 (Lch) and VR102 (Rch) so that the VU meter becomes lit, including the "OdB" part on the VU meter.



AUDIO * This circuit board is viewed from component side.

4-5. TUNER IF CIRCUIT

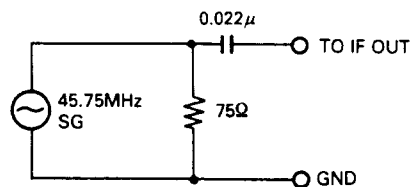


Fig. 1 Input pad

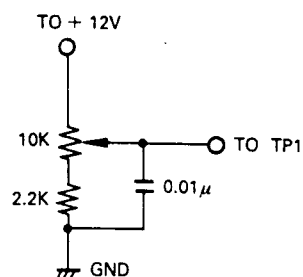
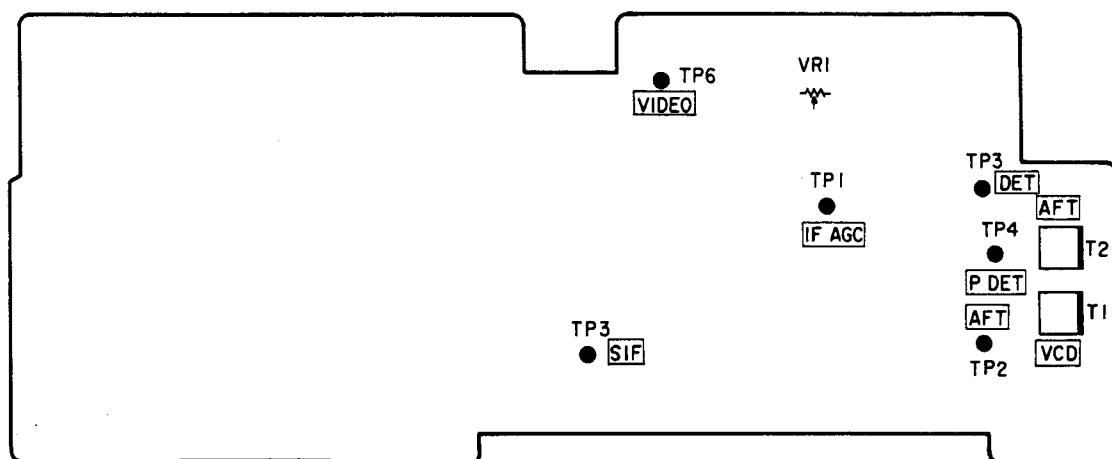


Fig. 2 IF AGC adjustment Jig

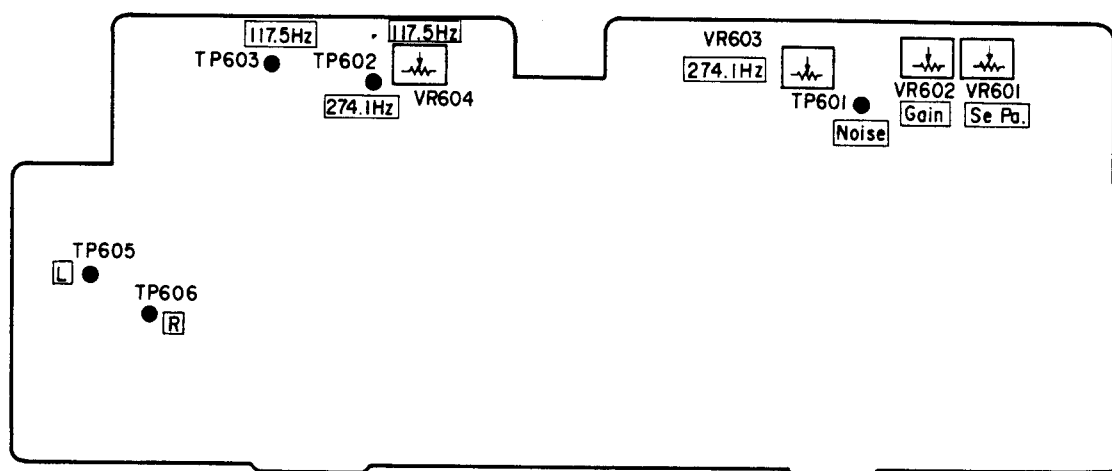
No.	Item	Check Point	Adjustment Parts	Signal & Mode	Description and Waveform
1	VCO (P.DET)	TP4	T1 (VCO)		<ol style="list-style-type: none"> 1. Feed 45.75MHz, 80dBu (no modulation) signal to the IF terminals of the tuner pack through the input pad shown in Figure 1. 2. Connect TP1 to the GND. 3. Connect digital voltmeter to TP4 and read the value. 4. Open the TP1 from the GND. 5. Adjust T1 until the voltmeter shows the same value obtained in the step 3.
2	V.IFT (AFT)	TP2	T2 (AFT)		<ol style="list-style-type: none"> 1. Use the test setup shown in Figure 1. 2. Connect the IF AGC adjustment jig to TP1 and voltmeter to TP5. 3. Adjust VR of the AGC adjustment jig until voltage at TP5 shows 3.0V. 4. Connect oscilloscope's probe (10:1) to TP2. 5. Slowly turn T2 and the voltage at TP2 will change rapidly from about 9V to 0.5V or vice versa. Adjust the T2 until $4.5V \pm 0.5VDC$ is obtained. <div style="text-align: center;"> <p>Voltage of TP2 (Vpc)</p> <p>9V 4.5V 0.5V</p> <p>Shallow Core position Deep</p> </div>
3	RF AGC	TP6	VR1 (AGC)		<ol style="list-style-type: none"> 1. Receive a VHF signal (input signal level $61dB\mu$). 2. Adjust VR1 until $6.5V \pm 0.5VDC$ is obtained at TP6.



TUNER/IF

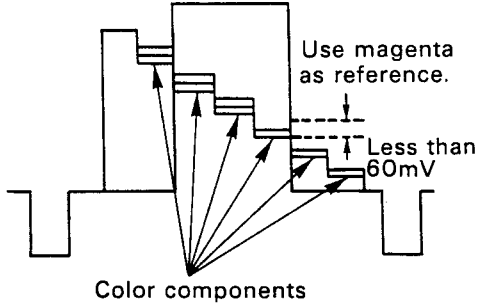
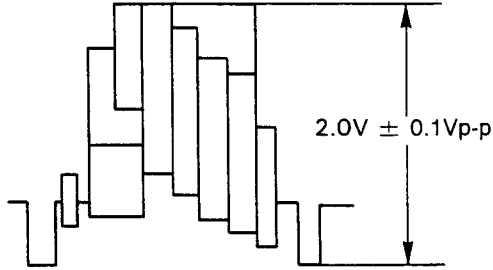
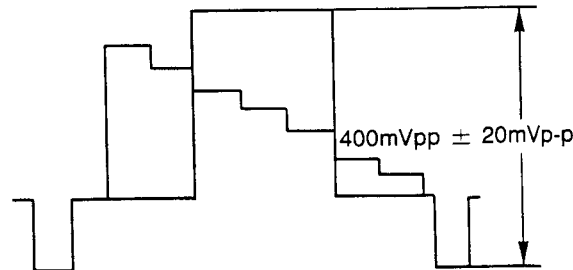
4-6. DECODER CIRCUIT (Decoder board)

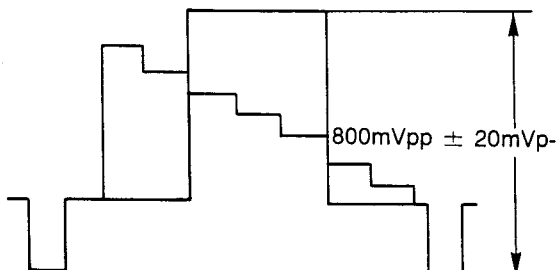
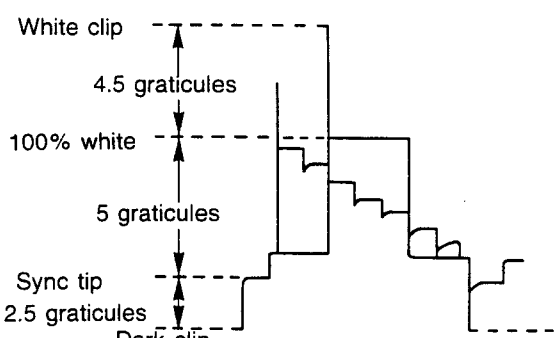
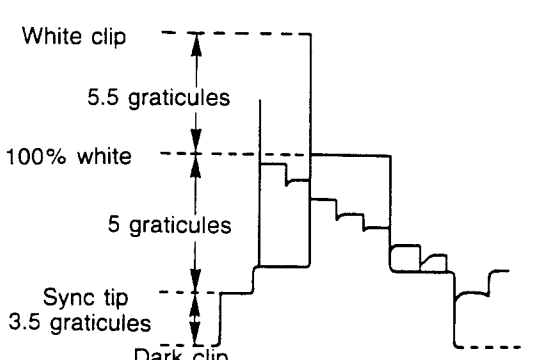
No.	Item	Check Point	Adjustment Parts	Signal & Mode	Description
1	3.5 fH	TP601	T603	TV audio multiplex system TV channel modulator	1. Set the TV audio multiplex system modulator, and Receive it. 2. Adjust T603 so that TP601 waveform will have the maximum amplitude.
2	1/57 fH	TP603	VR604	TV audio multiplex system TV channel modulator	1. Set the TV audio multiplex system modulator to 2-sound, and Receive it. 2. Adjust VR604 so that TP603 waveform will have the maximum amplitude.
3	1/133 fH	TP602	VR603 VR602	TV audio multiplex system TV channel modulator	1. Set the TV audio multiplex system modulator to STEREO, and Receive it. 2. Adjust VR603 so that TP602 waveform will have the maximum amplitude. 3. Adjust VR602 so that TP602 waveform height will have 7.5 ~ 8.5 Vp-p.
4	STEREO separation	TP605	VR601	TV audio multiplex system TV channel modulator	1. Set the TV audio multiplex system modulator to STEREO R CH 400 Hz OdB, and Receive it. 2. Adjust VR601 so that TP605 waveform will have the minimum amplitude.

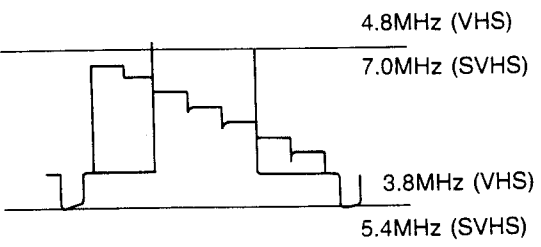
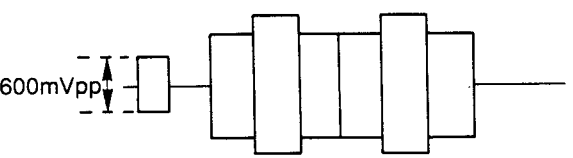


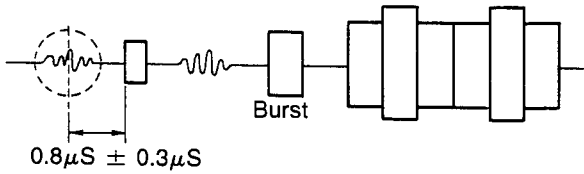
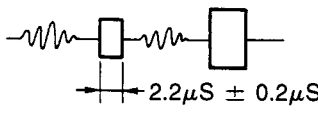
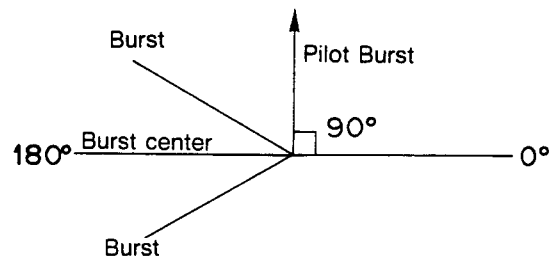
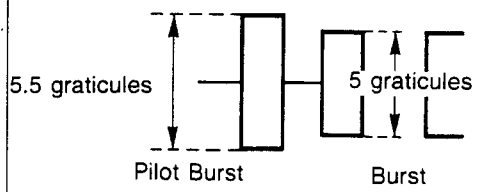
DECODER * This circuit board is viewed from component side.

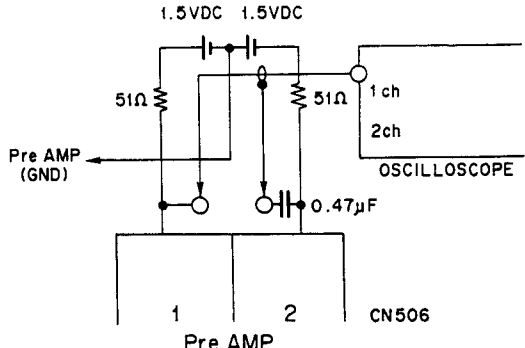
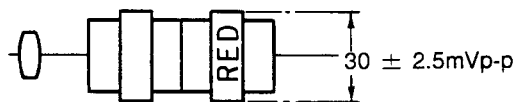
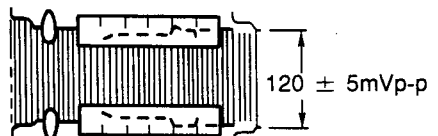
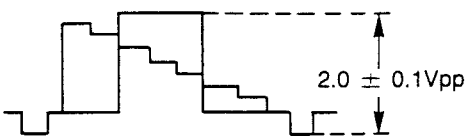
4-7. Video Circuit (Video board)

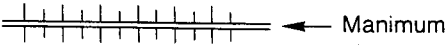
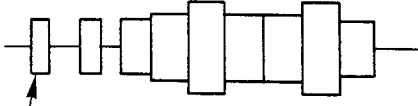
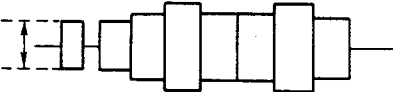
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
1	REC comb filter adjustment	TP415	VR404 T401	E.E	<p>1. Connect an oscilloscope to TP415. 2. Adjust VR404 and T401 alternately so that color levels of the waveform show minimum amplitude.</p>  <p>Use magenta as reference. Less than 60mV Color components</p>
2	Comb filter gain adjustment	TP416 TP413	VR414	E.E	<p>1. Connect CH1 of the oscilloscope to TP416 and CH2 to TP413. 2. Adjust VR414 so that p-p value of white peaks of waveforms at TP416 and TP413 show the same level.</p>
3	AGC level adjustment	TP201	VR201	E.E	<p>1. Adjust VR201 so that the p-p value up to the white peak of the waveform at TP201 shows $2.0V \pm 0.1V$</p>  <p>$2.0V \pm 0.1V_{p-p}$</p>
4	Sub-emphasis level adjustment	TP203	VR203	E.E VHS/S VHS :S VHS	<p>1. Adjust VR203 so that the p-p value of the waveform at TP203 shows $400mV \pm 20mV_{p-p}$.</p>  <p>$400mV_{pp} \pm 20mV_{p-p}$</p>
5	limiter level adjustment	TP212	VR202	E.E VHS/S VHS :S VHS	<p>1. Adjust VR202 so that the DC level at T212 shows $3.48V \pm 0.05V_{DC}$, using a digital voltmeter.</p>

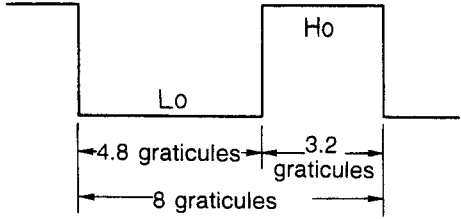
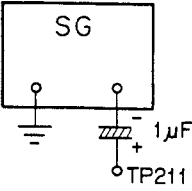
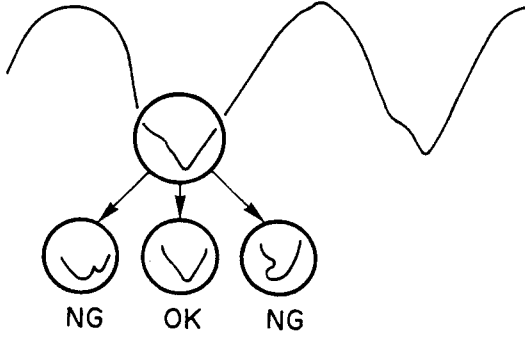
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
6	Sub-emphasis output level adjustment	TP204	VR204	E.E VHS/S VHS :S VHS	<p>1. Adjust VR204 so that white peak of the waveform at TP204 shows $800\text{mV} \pm 20\text{mVp-p}$.</p> 
7	VHS white & dark clip adjustment	TP205	VR209 (White) VR210 (Dark)	E.E VHS/S VHS :VHS LP mode	<p>1. Adjust oscilloscope so that amplitude between 100% white and sync tip of the waveform at TP205 shows 5 graticules.</p> <p>2. Adjust VR209 so that the white clip shows 4.5 graticules ($90\% \pm 10\%$).</p> <p>3. Adjust VR210 so that the dark clip shows 2.5 graticules ($50\% \pm 10\%$).</p>  <p>Note: Make sure the waveform is not saturated with excessive clip.</p>
8	S VHS white & dark clip adjustment	TP205	VR216 (White) VR217 (Dark)	E.E VHS/S VHS :S VHS LP mode	<p>1. Adjust oscilloscope so that amplitude between 100% white and sync tip of the waveform at TP205 shows 5 graticules.</p> <p>2. Adjust VR216 so that white clip level shows 5.5 graticules ($110\% \pm 10\%$).</p> <p>3. Adjust VR217 so that dark clip level shows 3.5 graticules ($70\% \pm 10\%$).</p>  <p>Note: Make sure the waveform is not saturated with excessive clip.</p>

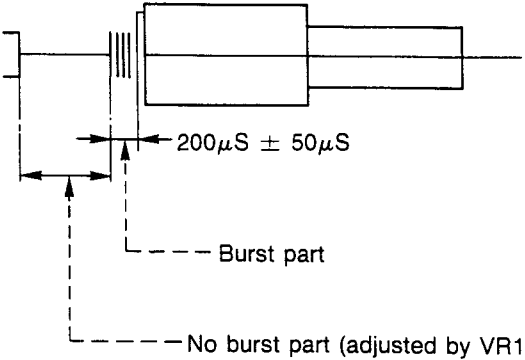
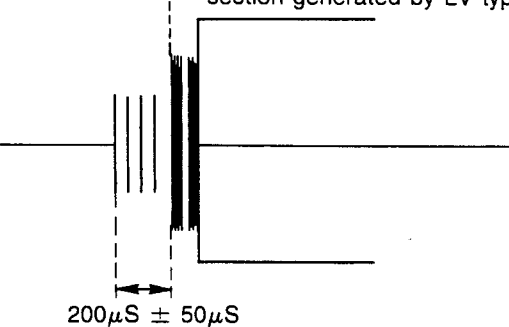
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
9	Carrier deviation adjustment	TP206	VR208 VR206 (VHS mode) VR207 VR205 (S VHS mode)	E.E VHS mode SVHS mode	<ol style="list-style-type: none"> 1. Connect the probe to the carrier checker and the output of the checker to the oscilloscope. 2. Connect the probe to TP206. 3. Set the VTR to the VHS mode. Adjust VR208 so that sync tip matches 3.8MHz marker, and adjust VR206 so that white peak matches 4.8MHz marker. 4. Set the VTR to the SVHS mode. Adjust VR207 so that sync tip matches 5.4MHz marker, and adjust VR205 so that white peak matches 7.0MHz marker.  <p>Note: De-emphasis should be off.</p>
10	Color initial setting adjustment	TP401	VR401	REC VHS/S VHS :VHS SP	<ol style="list-style-type: none"> 1. Fully rotate VR408 and VR406 counterclockwise. 2. Adjust VR401 so that DC voltage at TP401 shows $2.65 \pm 0.05\text{VDC}$, using a digital voltmeter.
11	EE Color level adjustment	TP412	VR412	REC VHS/S VHS :VHS SP	<ol style="list-style-type: none"> 1. Adjust VR412 so that burst signal level of the color signal waveform at TP412 shows 600mVp-p. <p>Note: Make sure the comb filter adjustment has been completed before proceeding this adjustment.</p> 

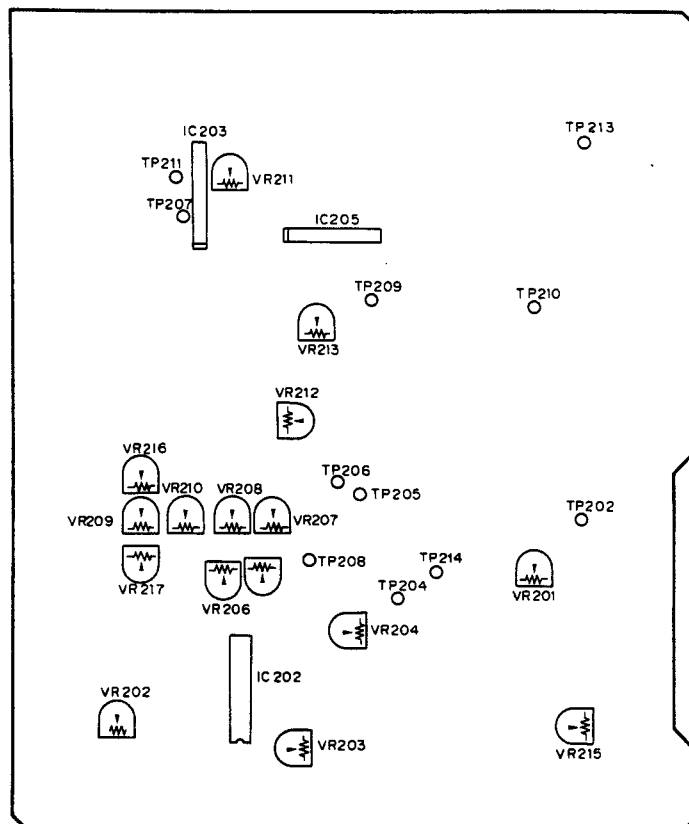
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
12	Pilot burst adjustment	TP406	VR408	REC VHS/S VHS :S VHS SP	<p>1. Observe waveforms at TP406. Adjust VR408 so that interval between front edge of H sync signal and beginning of pilot burst signal shows $0.8\mu\text{S} \pm 0.3\mu\text{S}$.</p>  <p>0.8μS \pm 0.3μS</p> <p>Burst</p>
		TP406	VR406	REC VHS/S VHS :S VHS SP	<p>2. Next, adjust VR406 so that the burst width of the pilot burst signal shows $2.2\mu\text{S} \pm 0.2\mu\text{S}$</p>  <p>2.2μS \pm 0.2μS</p>
		VIDEO OUT TP406	VR403	REC VHS/S VHS :S VHS SP	<p>3. Feed the VIDEO OUT to the A-ch of a vector scope and the color signal at TP406 to the B-ch. Trigger the scope with the A-ch signal. Adjust the VR403 so that phase of the pilot burst signal shows +90 degrees from the phase center of the burst signal.</p>  <p>Burst</p> <p>Pilot Burst</p> <p>180° Burst center</p> <p>90°</p> <p>0°</p> <p>Burst</p>
		TP406	VR402	REC VHS/S VHS :S VHS SP	<p>4. Monitor waveform at TP406 with the oscilloscope and adjust CAL of the scope so that the burst signal amplitude shows 5 graticules. Adjust VR402 so that amplitude of the pilot burst shows 5.5 ± 0.2 graticules.</p>  <p>5.5 graticules</p> <p>Pilot Burst</p> <p>Burst</p> <p>5 graticules</p>

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
13	REC current adjustment	PreAmp PCB CN506	VR501 VR502	REC VHS/S VHS :S VHS LP	<p>1. Connect 2P of the record current adjustment jig to CN506 of the preamplifier and the alligator clip to the shield case of the preamplifier.</p>  <p>2. Temporarily turn the VR501 fully counterclockwise. Adjust VR502 so that amplitude of red signal part shows $30 \pm 2\text{mVp-p}$.</p>  <p>3. Next, adjust VR501 so that sync part shows $120 \pm 5\text{mVp-p}$.</p>  <p>REC Y LEVEL</p> <p>4. After completion of the adjustment, connect the connector attached to the shield case to the CN506.</p>
14	PBY level adjustment	TP201	VR212 VR213	REC ↓ PB VHS/S VHS :VHS LP REC ↓ PB VHS/S VHS :S VHS SP	<p>1. Set the VTR to VHS, LP mode. Monitor the waveform at TP201 and adjust VR212 so that PB signal level shows $2.0 \pm 0.1\text{Vp-p}$.</p> <p>2. Next, set the VTR to SVHS, SP mode. Monitor the waveform at TP201 and adjust VR213 so that PB signal level shows $2.0 \pm 0.1\text{Vp-p}$.</p> 

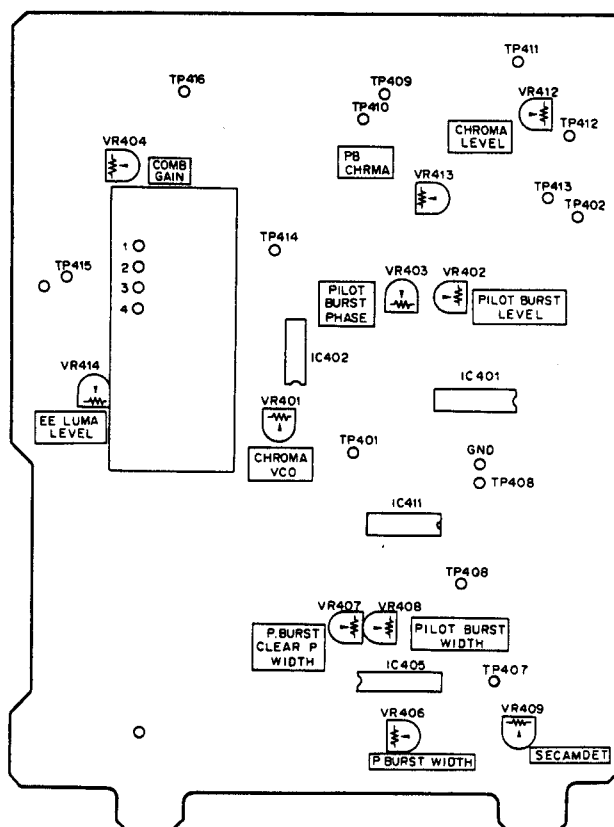
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
15	Line noise canceller adjustment	TP214	VR215	MH-2	<p>1. Play back the VHS color bar alignment tape.</p> <p>2. Monitor signals at TP214, and a difference signal between the current signal and a 1H-delayed signal will be observed. Adjust VR215 so that the DC component shows minimum.</p> 
16	Pilot burst clear pulse adjustment	TP412	VR407	REC ↓ PB VHS/S VHS :S VHS SP	<p>1. Monitor signals at TP412. Adjust VR407 so that pilot burst signal of the color signal disappears.</p>  <p>Adjust VR407 so that the pilot burst disappears.</p>
17	PB color level adjustment	TP412	VR413	REC ↓ PB VHS/S VHS :S VHS SP	<p>1. Monitor signals at TP412 and adjust VR413 so that the burst signal part of the color signal shows 600mVp-p ± 20mVp-p.</p> 

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
18	SECAM discriminator adjustment	TP211 TP207	VR211	PB	<p>1. Feed sinewave of $25\text{Hz} \pm 3\text{Hz}$, $200\text{mVp-p} \pm 10\text{mVp-p}$ to TP211. (Cut DC component with a capacitor.)*2</p> <p>2. Play back the SVHS identification adjustment tape.*1</p> <p>3. Adjust VR211 so that the output waveform at TP207 shows following waveform.</p> <p>(Oscilloscope: DC range)</p>  <p>*1: Prepare a tape recorded with 4.9MHz carrier signal before proceeding this adjustment and use the tape as the SVHS identification adjustment tape. (Either of a VHS or a SVHS tape will be used.)</p>  <p>*2: Cut off the DC component with a $1\mu\text{F}$ capacitor connected as shown below.</p>
19	SECAM discriminator adjustment	TP407	VR409	REC SECAM Color bar VHS/S VHS :VHS	<p>1. Monitor waveforms at TP407 while recording the SECAM color bar signal. Adjust VR409 so that the amplitude shows $4.0 \pm 0.1\text{Vp-p}$.</p>  <p>2. After completion of the adjustment, play back the tape just recorded and check the same waveform is obtained.</p>

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
20	color CTRL adjustment	PAL color bar SVHS Playback of auto-recording	VR1	TP412 (Trigger TP208)	<p>Adjust VR1 so that the burst part shown below is $200\mu\text{S} \pm 50\mu\text{S}$.</p>  <p>(Magnified diagram)</p>  <p>Adjust after PB chroma adjustment.</p>

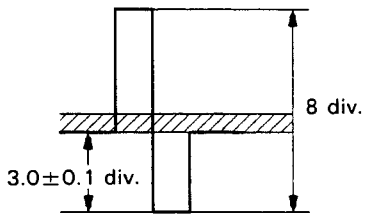
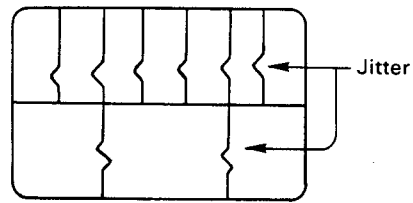
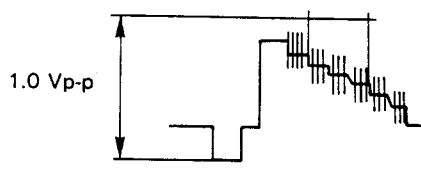
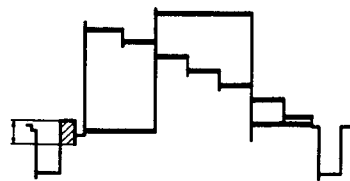



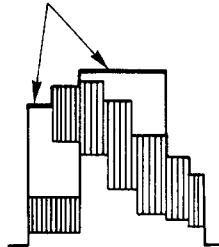

VIDEO-Y

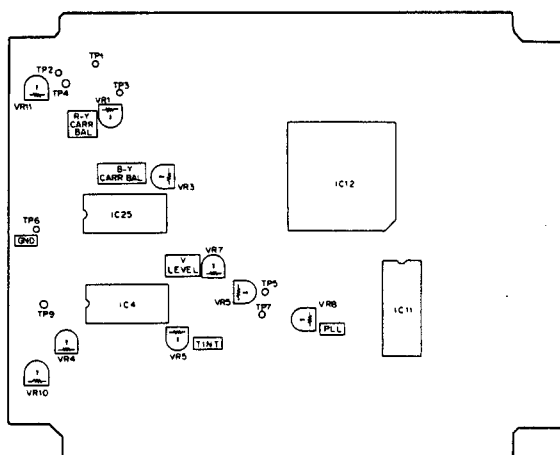


VIDEO-C

4-8. DIGITAL CIRCUIT (Digital board)

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
					The adjustment of this circuit should be performed to reduce temperature drift influence after approximately ten minutes have passed since power was supplied.
1	Input Signal LEVEL (EE/PB)	TP3 EE/PB VIDEO (Y)	CHECK	EE, LINE (1Vpp, 75Ω) Color Bar	Input this signal and look at TP1 on the oscilloscope. Check if the EE/PB input signal level is 2.0Vp-p.
2	NR PLL	TP5	VR8	EE LINE Color Bar	Adjust the level of TP5 on the oscilloscope as shown below. 
		Monitor Screen	VR9	DIGITAL MEMORY ON EE LINE Color Bar	1) Adjust VR9 so that the jitter on the border of the color bar will disappear. 
		TP8	VR8	DIGITAL MEMORY ON	2) At this time, confirm that the voltage of TP551 is 2.9 ± 0.25 Vpp, if it is out of this range, adjust VR8 in the digital memory mode, so that the voltage at TP8 becomes 2.9 ± 0.1 V.
3	Y-LEVEL	Video OUT	VR7	EE LINE Color Bar DNR II	Adjust VR7 so that the voltage between the sync tip and white peak is 1.0 Vpp. 
4	CHROMA LEVEL	Monitor sensor VIDEO OUT	VR4	Same as above EE LINE DNR II	Adjust VR4 so that the burst level is 0.3Vp-p. 

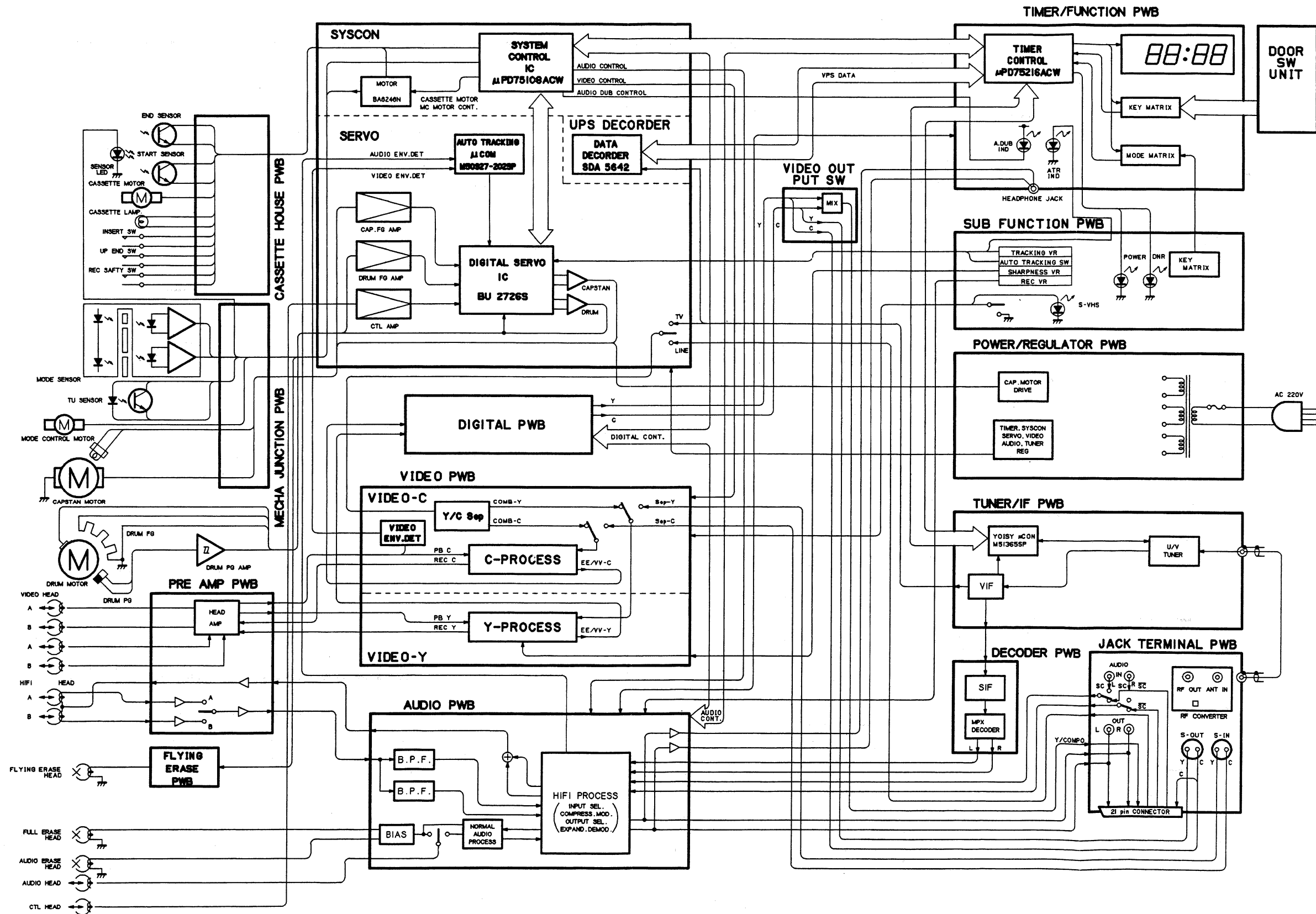
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
5	B-Y CARR BALL R-Y CARR BAL	Video OUT	VR1 VR3	EE LINE Color Bar DNR II	<p>Adjust VR1 and VR3 so the proportion of chroma on the white part of the color bar is at a minimum.</p>  <p>Before adjustment After adjustment</p> <p>This part</p> 
6	TINT	Monitor TP2 Screen	VR5	EE LINE DNR II	<p>Adjust VR5 so that the amplitude of the color waveform becomes stable and maximum. In addition, the waveform should not be jittery.</p> 



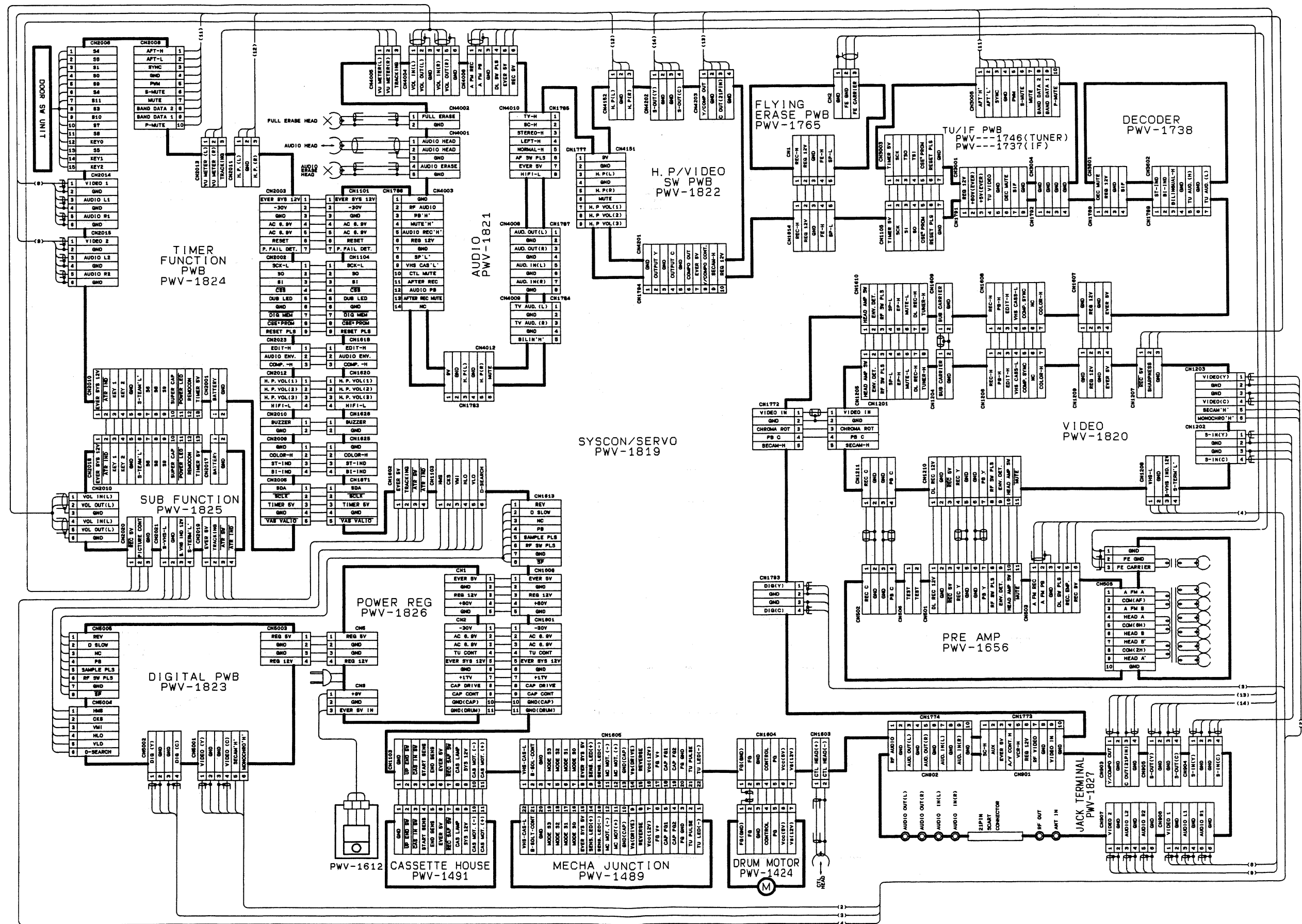
DIGITAL * This circuit board is view from component side.

SECTION 4 BLOCK AND SCHEMATIC DIAGRAM

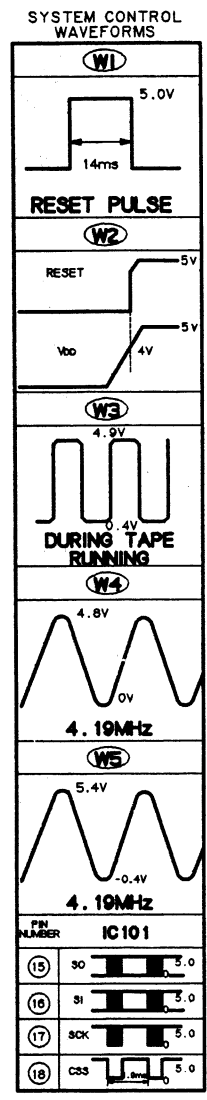
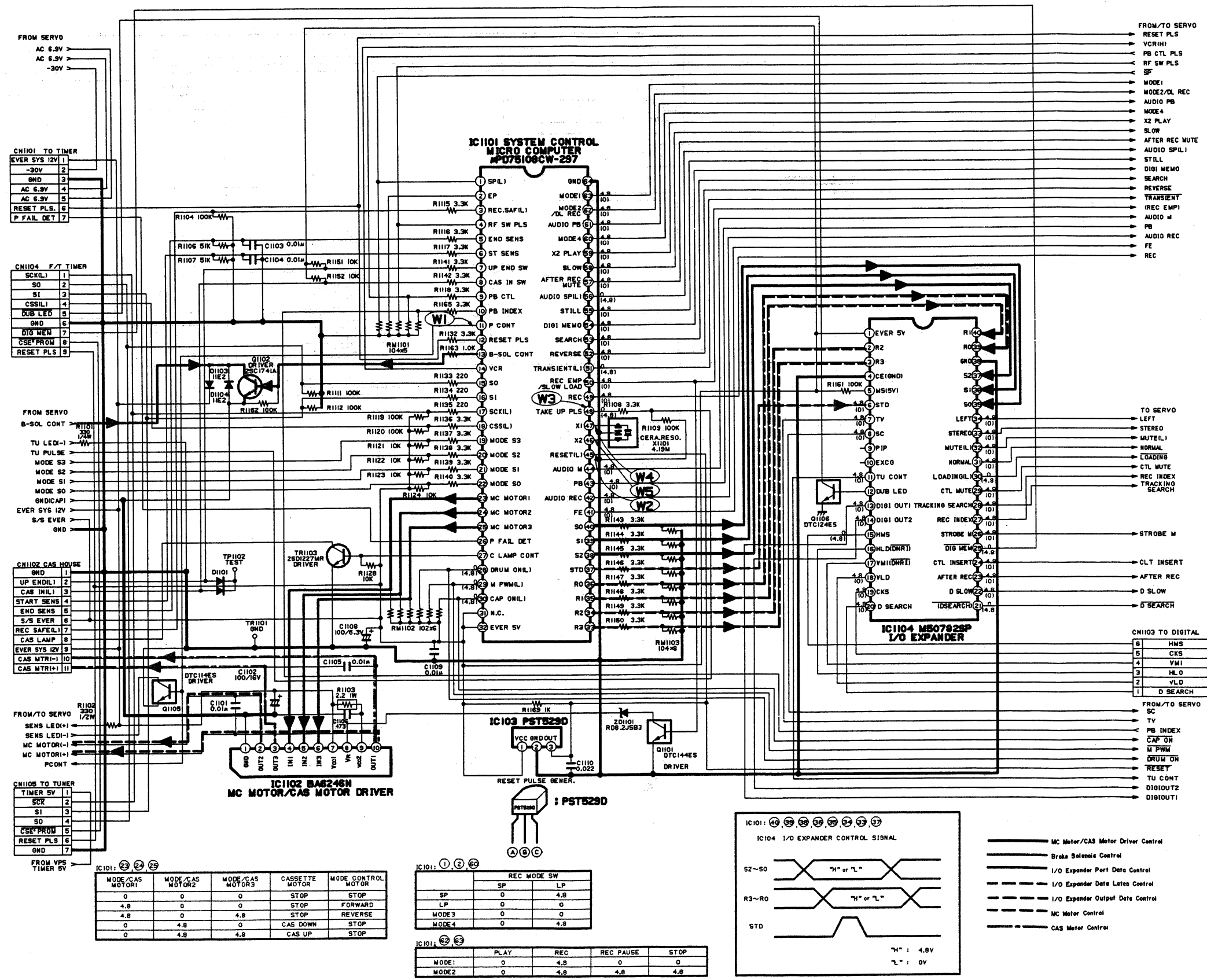
1. GENERAL BLOCK DIAGRAM



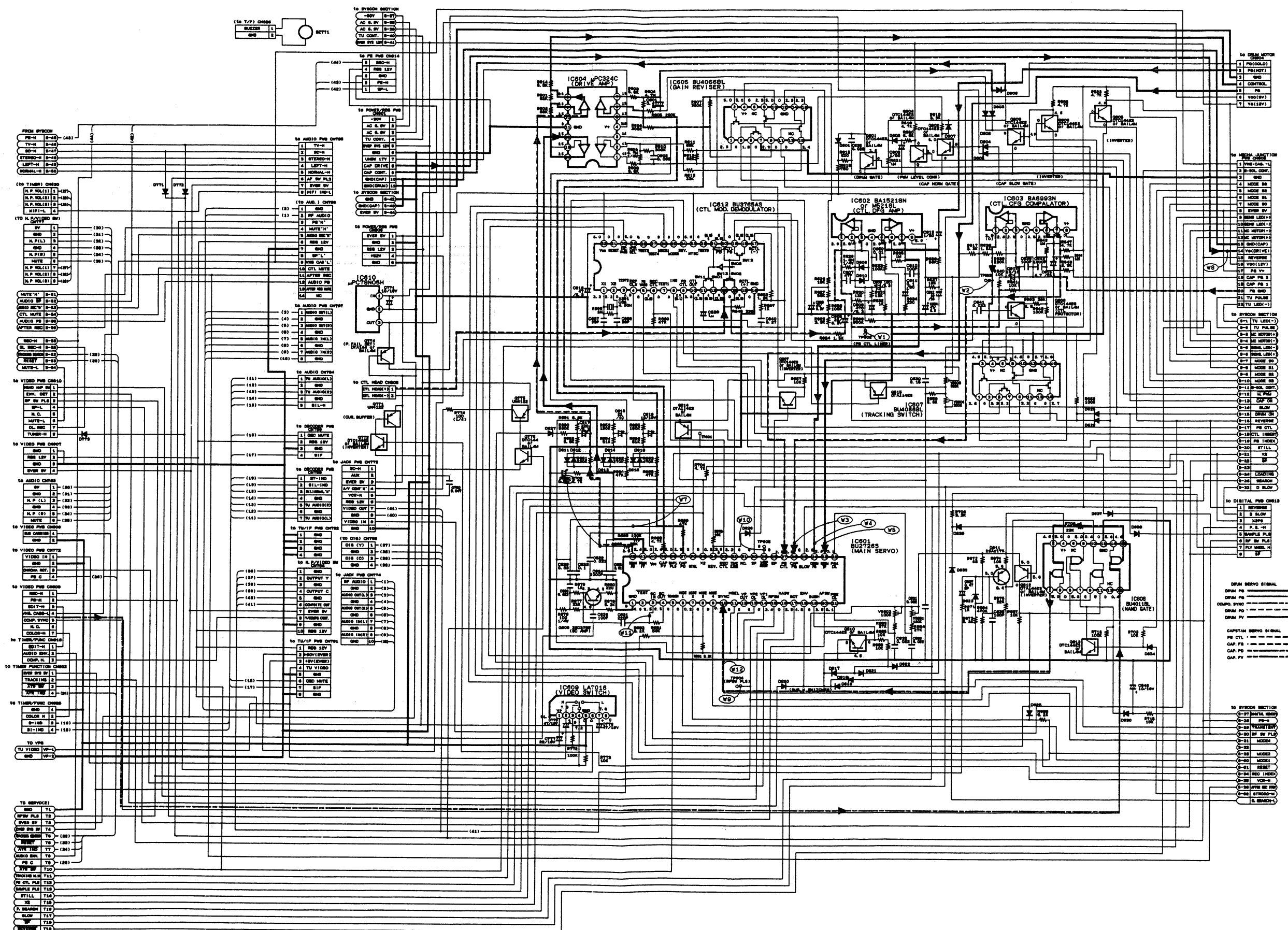
2. SCHEMATIC/CIRCUIT BOARD DIAGRAMS
2-1. FRAME WIRING



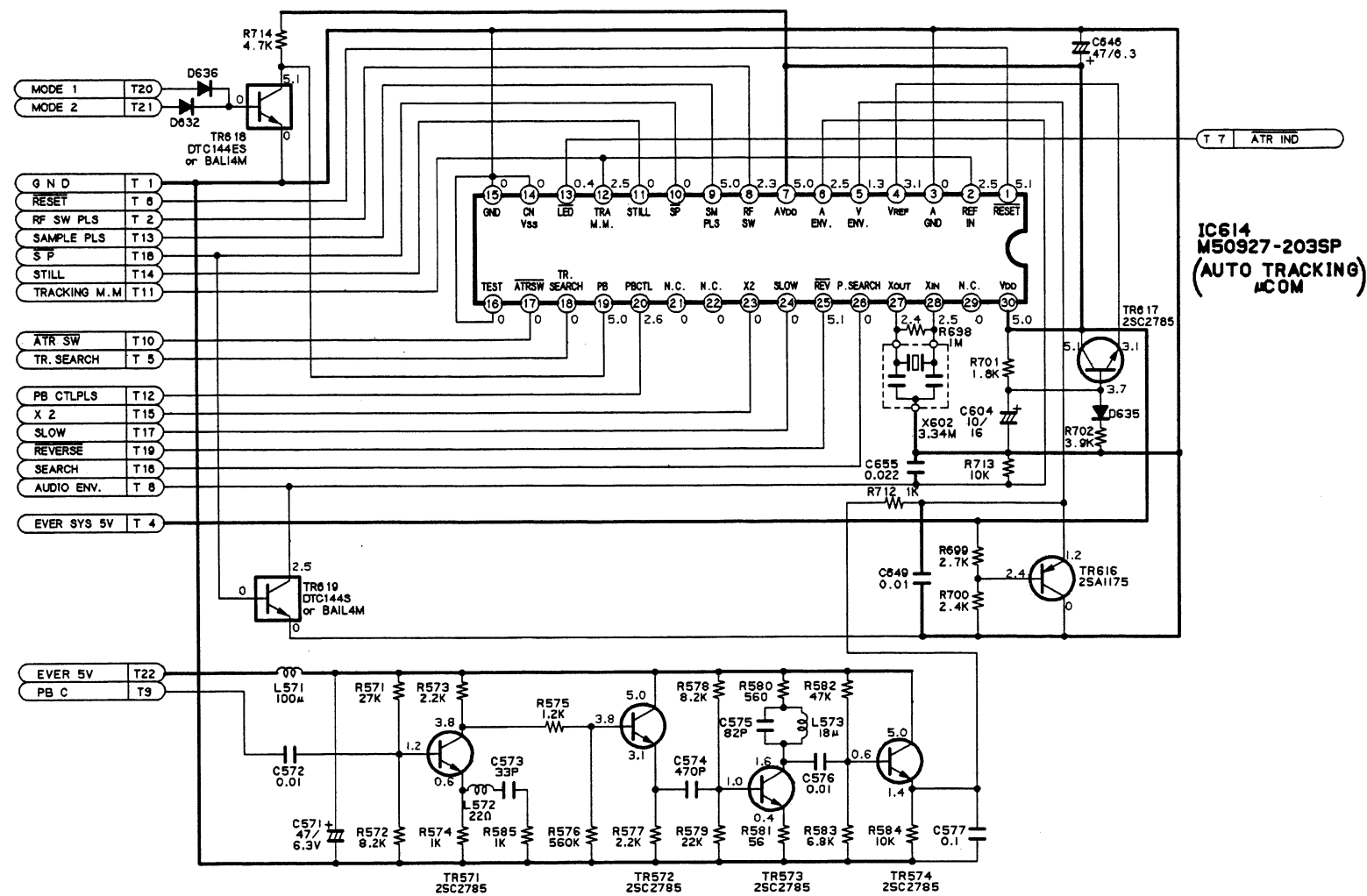
2-2. SYSTEM CONTROL SCHEMATIC DIAGRAM



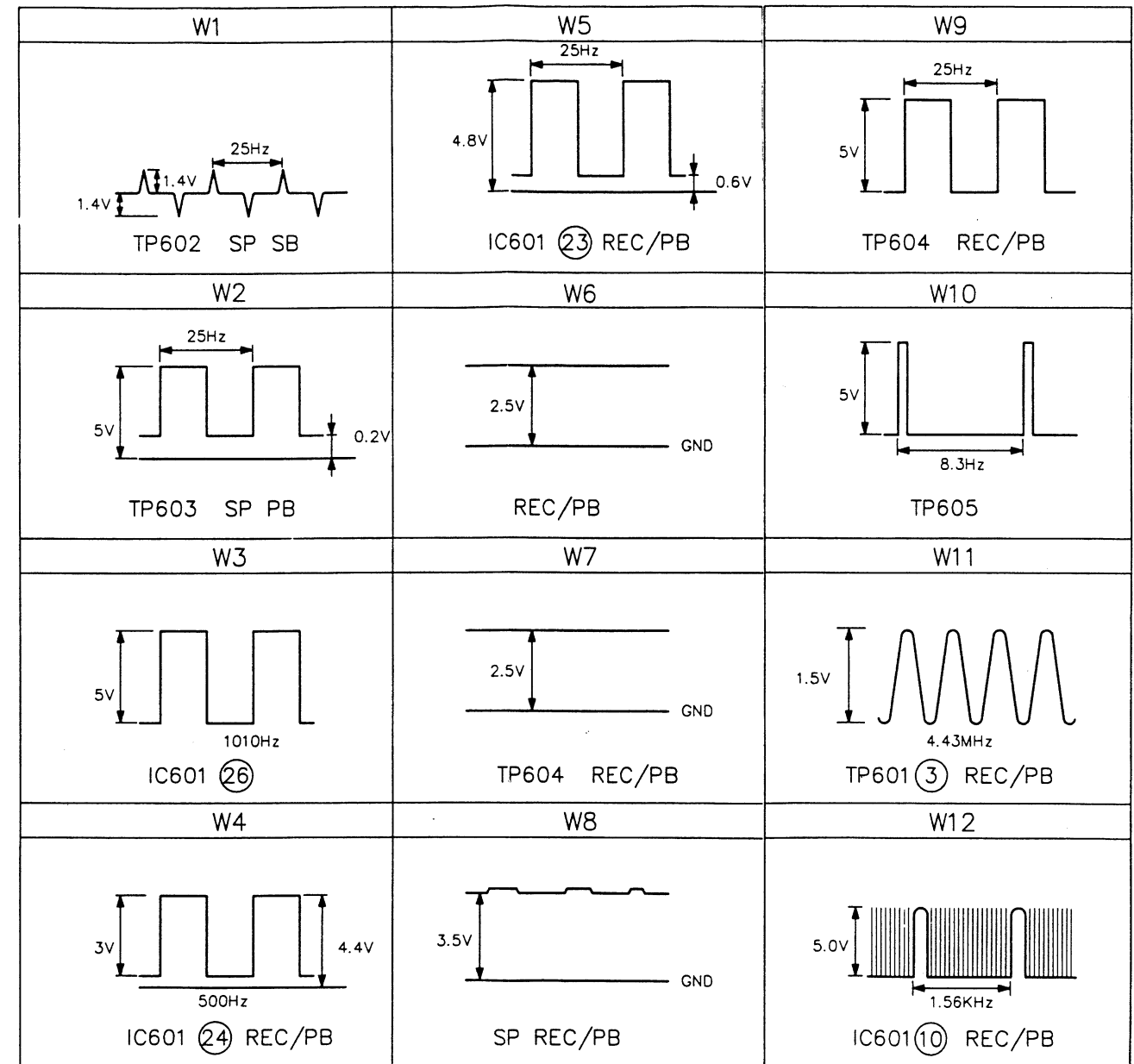
2-3. SERVO SCHEMATIC DIAGRAM



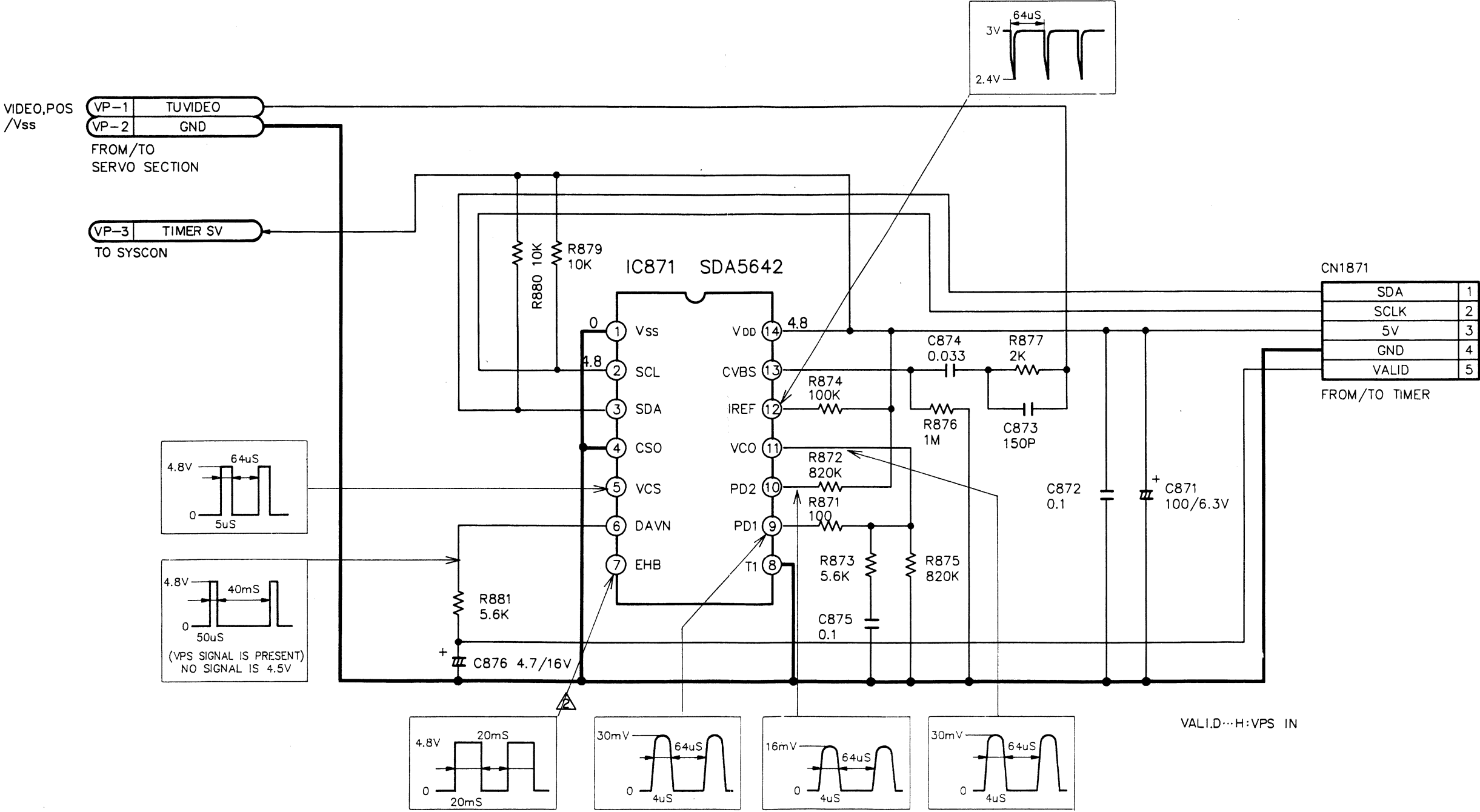
2-4. SERVO (AUTO TRACKING) SCHEMATIC DIAGRAM



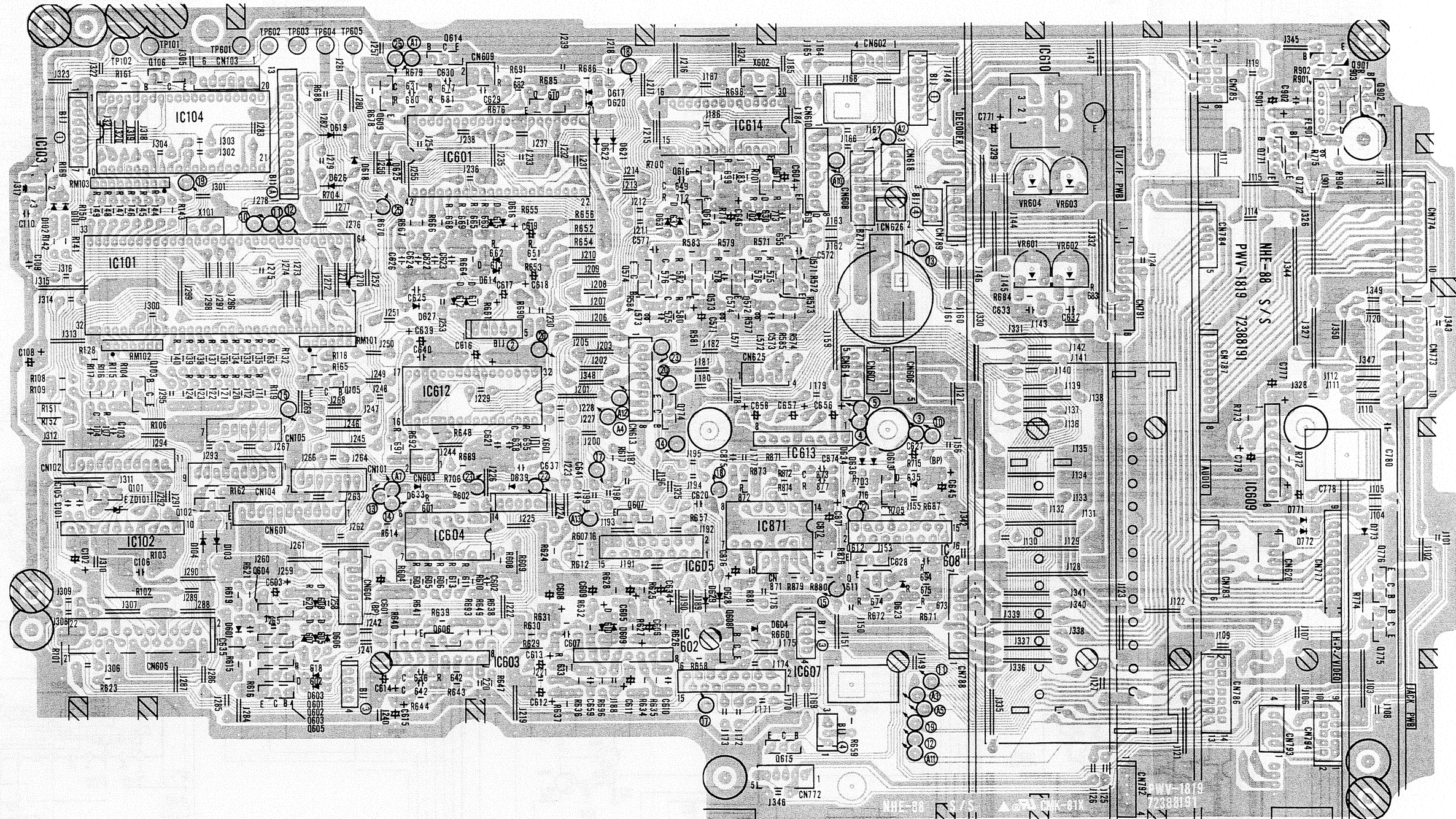
SERVO WAVEFORMS



2-5. VPS DECODER SCHEMATIC DIAGRAM

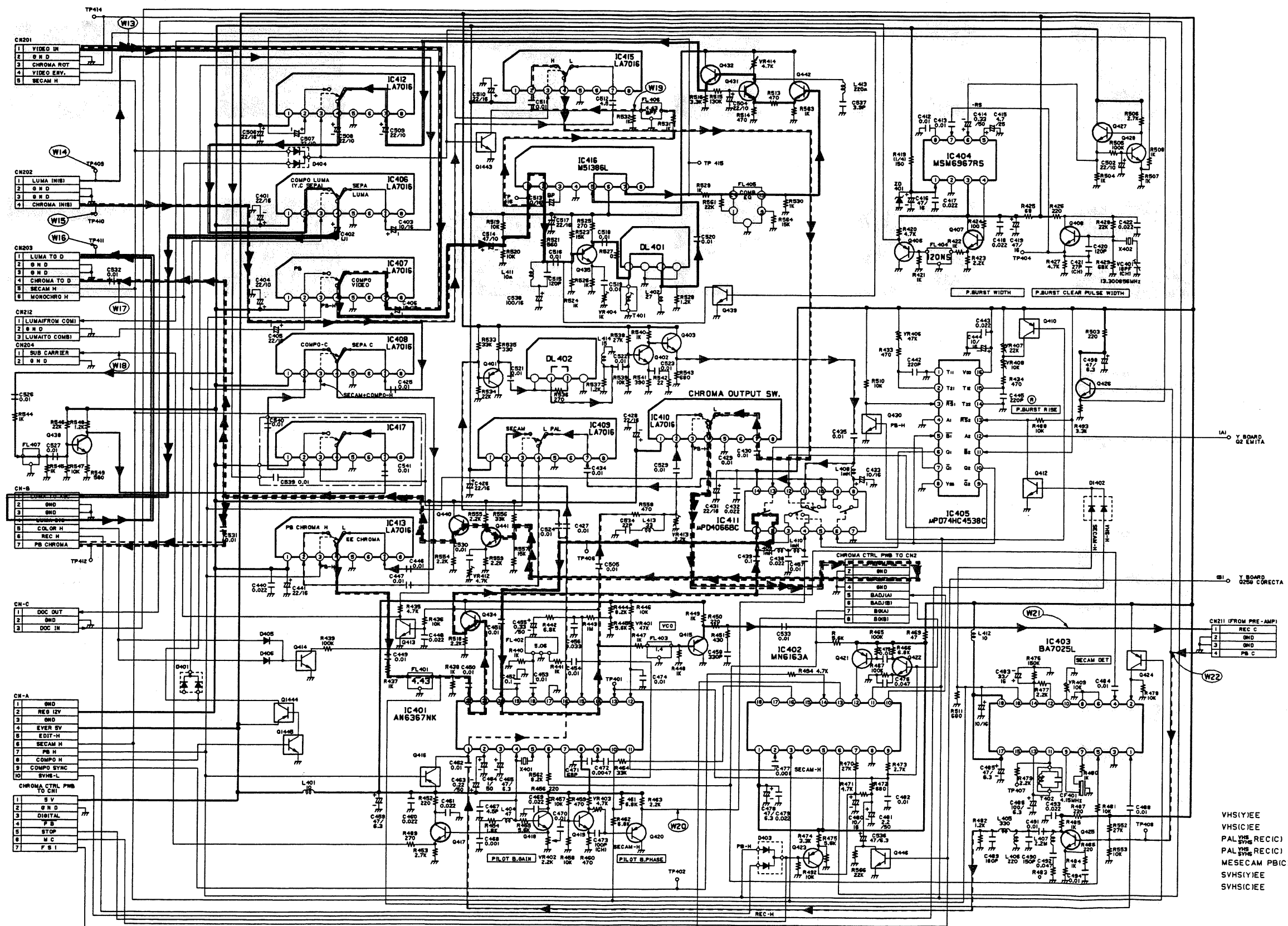


2-6. SYSTEM CONTROL/SERVO/VPS DECORDER CIRCUIT BOARD (SOLDER SIDE)



VIDEO-Y





IC's AND TR's TERMINAL VOLTAGE OF THE VIDEO SECTION

VIDEO (Y)

		REC (V)	PLAY (V)
Q-1	E	5.0	5.0
	B	4.4	4.4
	C	4.5	
Q-2	E		3.9
	B		4.6
	C	5.0	5.0
Q-203	E	-1.4 m	-0.9 m
	B	87.3 m	4.9
	C	5.0	6.6 m
Q-204	E	5.0	5.0
	B	5.0	26.3 m
	C	232.1 m	4.9
Q-205	E	-0.7 m	-0.3
	B	6.3 m	3.5
	C	5.0	28.0 m
Q-206	E	-0.2 m	-0.3 m
	B	4.9	45.0 m
	C	6.5 m	3.5
Q-208	E	-0.5 m	-0.8 m
	B	6.4 m	3.5
	C	5.0	27.3 m
Q-209	E	5.0	5.0
	B	5.0	24.1 m
	C	349.5 m	4.9
Q-210	E	11.9	11.9
	B	21.8 m	11.9
	C	11.8	-1.8 m
Q-211	E	-0.4 m	-5.1 m
	B	5.9	10.8 m
	C	21.6 m	11.9
Q-212	E	-0.5 m	
	B	4.9	422.7 m
	C	1.6 m	4.3
Q-213	E	1402.1 m	
	B	14.5 m	5.0
	C	478.3 m	
Q-215	E	-4.1 m	-3.7 m
	B	579.1 m	612.2 m
	C	9.2	
Q-216	E	2.1	2.1
	B	1432.8 m	1445.0 m
	C	-4.0 m	-2.1 m
Q-217	E	-0.3 m	-0.1 m
	B	18.1 m	20.7 m
	C	4.4	4.4
Q-218	E	-0.4 m	-0.3 m
	B	0.7	5.0
	C	2.0	3.9 m
Q-219	E	-4.3 m	-4.4 m
	B	84.3 m	4.9
	C	5.0	21.4 m
Q-220	E		-4.3 m
	B		
	C		628.6 m
Q-221	E	5.0	5.0
	B	5.0	11.2 m
	C	658.0 m	5.0
Q-222	E	5.0	5.0
	B	658.2 m	5.0
	C	4.9	425.5 m
Q-223	E	4.6	
	B	5.0	
	C	5.0	
Q-224	E	-0.5 m	-4.6 m
	B	86.4 m	629.3 m
	C	5.0	11.1 m
Q-226	E	4.8	4.9
	B	1.4 m	5.0
	C	4.8	
Q-227	E	-4.0 m	0.2 m
	B	4.9	425.2 m
	C	3.5 m	1674.6 m

		REC (V)	PLAY (V)
Q-228	E	4.8	4.9
	B	1.4 m	4.9
	C	4.8	2.0
Q-229	E	-4.0	0.2 m
	B	4.9	425.1 m
	C	1.4 m	4.9
Q-230	E	2.0	2.1
	B	1443.1 m	4.9
	C	2.0	2.0
Q-231	E	-4.5 m	1573.5 m
	B	-4.5 m	2.2
	C	232.4 m	4.8
Q-232	E	-4.8 m	1.9
	B	126.7 m	2.6
	C	232.1 m	4.8
Q-233	E	-0.6 m	571.9 m
	B	-0.6 m	1188.7 m
	C	235.4 m	4.8
Q-234	E	-0.6 m	1193.2 m
	B	93.5 m	1826.2 m
	C	235.5 m	3.7
Q-235	E	-0.1 m	3.6
	B	235.5 m	2.8
	C	235.5 m	4.9
Q-236	E	-0.2 m	551.5 m
	B	-0.2 m	1188.0 m
	C	235.5 m	3.7
Q-237	E	-0.3 m	1192.4 m
	B	93.4 m	1824.3 m
	C	235.4 m	3.6
Q-238	E	3.8	-2.4 m
	B	4.1	426.7 m
	C	10.1	
Q-239	E	9.1	-5.6 m
	B	8.1	-2.3 m
	C	11.7	-1.6 m
Q-240	E	3.7	
	B	4.1	
	C	9.8	
Q-241	E	9.1	-5.5 m
	B	9.8	-1.4 m
	C	11.7	-1.4 m
Q-242	E	-0.5 m	-0.4 m
	B	4.9	44.9 m
	C	6.6 m	3.5
Q-243	E	11.9	12.0
	B	1.5 m	-4.7 m
	C	1.3 m	-4.6 m
Q-244	E	-0.4 m	-4.5 m
	B	4.9	425.3 m
	C	-0.2 m	-4.7 m
Q-246	E	-0.6 m	-4.8 m
	B	4.4	4.4
	C	1.2 m	
Q-249	E	-0.3 m	1302.4 m
	B	-0.3 m	1932.8 m
	C	235.8 m	4.8
Q-250	E	1804.3 m	1700.2 m
	B	1158.1 m	1055.4 m
	C	-0.1 m	
Q-250	E	1.8	1701.8 m
	B	1.2	1048.8 m
	C	-0.3 m	
Q-251	E	7.4	7.4
	B	8.0	8.0
	C	9.7	9.7
Q-252	E	9.0	9.1
	B	9.7	9.7
	C	11.9	11.9
Q-253	E	1803.8 m	
	B	5.0	5.0
	C	1802.7 m	1697.6 m
Q-254	E	-0.7 m	
	B	590.1 m	590.1 m
	C	4.1	4.1

		REC (V)	PLAY (V)
Q-255	E	-0.6 m	-4.4 m
	B	4.1	4.1
	C	1.3 m	-2.5 m
Q-256	E	-1.0 m	-4.6 m
	B	590.0 m	588.9 m
	C	87.3 m	4.8

VIDEO (C)

		REC (V)	PLAY (V)
Q-401	E	1.7	1.7
	B	1.0	1.0
	C	0.6 m	-3.5 m
Q-402	E	0.7	0.7
	B	1.3	1.3
	C	3.2	3.2
Q-403	E	2.5	2.6
	B	3.2	3.2
	C	5.0	5.0
Q-406	E	2.0	2.0
	B	1.4	1.4
	C	-1.4 m	-2.6 m
Q-407	E	2.7	2.7
	B	3.3	3.3
	C	4.0	4.0
Q-408	E	3.1	3.1
	B	3.6	3.6
	C	4.9	4.8
Q-410	E	5.0	5.0
	B	88.1 m	4.9
	C	5.0	7.7 m
Q-412	E	0.4 m	
	B	0.3	4.5
	C	5.0	7.7 m
Q-413	E	-0.3 m	-1.6 m
	B	1.9	1.9
	C	71.4 m	68.8 m
Q-415	E	-4.2 m	-4.3 m
	B		
	C	-4.2 m	-4.3 m
Q-416	E	5.0	5.0
	B	85.3 m	4.9
	C	5.0	3.0
Q-417	E	1.8	1.9
	B	2.3	2.3
	C	4.9	4.8
Q-418	E	2.3	2.3
	B	2.9	2.9
	C	4.8	4.7
Q-419	E	1.8	1.8
	B	2.4	2.4
	C	3.2	3.1
Q-420	E	2.4	2.4
	B	1.8	1.8
	C	0.3 m	-1.5 m
Q-421	E	4.9	4.9
	B	5.7	4.8
	C	0.5	
Q-422	E	3.1	3.1
	B	3.6	4.7
	C	4.5	
Q-423	E	3.1	3.1
	B	4.4	4.3
	C	3.6	
Q-424	E	4.7	4.8
	B	88.7 m	4.9
	C	4.7	0.7 m
Q-425	E	0.7	
	B	1.3	1.3
	C	4.2	4.1
Q-426	E	0.7	0.7
	B	1.3	1.3
	C	5.0	5.0

VIDEO (C)

		REC (V)	PLAY (V)
Q-427	E	4.0	4.0
	B	4.6	4.9
	C	11.9	11.9
Q-428	E	2.7	2.9
	B	3.3	3.6
	C	4.6	4.9
Q-430	E	2.5	2.6
	B	3.2	3.2
	C	5.0	5.0
Q-434	E	2.8	2.8
	B	3.4	3.4
	C	5.0	5.0
Q-439	E	0.2 m	0.7 m
	B	0.3	255.6 m
	C	1.3	
Q-440	E	8.2	8.2
	B	8.8	8.9
	C	11.9	11.9
Q-441	E	3.1	3.1
	B	3.7	3.7
	C	8.8	8.9
Q-515	E	-1.8	-2.5 m
	B		254.5 m
	C	4.7	4.7

IC202

	REC (V)	PLAY (V)
1	1972.2 m	1951.6 m
2	86.7 m	4.9
3	3.5	3.4
4	3.3	3.3
5	4.5	4.4
6	3.8	3.7
7	1995.7 m	
8	4.9	4.9
9	1590.9 m	1443.2 m
10	3.7	3.6
11	3.7	3.6
12	3.7	3.7
13	0.8 m	-4.0 m
14	3.6	3.6
15	3.6	3.6
16	1941.5 m	1921.3 m
17	1941.6 m	1.9
18	1939.9 m	1919.7 m

IC203

	REC (V)	PLAY (V)
1	3.4	3.5
2	0.3	-4.3 m
3	5.0	4.8
4	0.3 m	-4.3 m
5	5.0	
6	3.3	
7	3.8	3.6
8	5.0	5.0
9	2.1	2.1

IC204

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.8	7.8
3	4.9	419.5 m
4	7.1	7.1
5	0.4	-4.1 m
6		
7	7.8	7.8
8		

IC205

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.7	7.8
3	4.9	420.7 m
4	7.1	7.1
5	0.2 m	-4.8 m
6		
7	7.8	7.8
8		

IC206

	REC (V)	PLAY (V)
1	11.9	12.0
2	7.8	7.8
3	83.7 m	4.8
4	7.1	7.1
5	-3.6 m	-2.2 m
6		
7	7.8	7.8
8		

IC401

	REC (V)	PLAY (V)
1	5.0	3.0
2	3.0	3.2
3	3.2	3.2
4	2.9	2.9
5	3.1	3.3
6	3.4	3.3
7	3.6	3.6
8	5.0	5.0
9	4.0	3.9
10	2.1	2.1
11	4.1	4.1
12	1.0	1.0
13	3.6	2.6
14	2.6	2.6
15	2.5	2.5
16	4.9	2.0
17	-0.1 m	-0.6 m
18	3.0	3.0
19	1.3	2.8
20	3.0	3.0
21	3.4	3.5
22	3.0	3.0

IC402

	REC (V)	PLAY (V)
1	4.9	4.9
2	2.6	2.6
3	0.6	0.6
4	0.3	0.3
5	4.9	4.9
6	5.0	
7	3.6	2.6
8	-0.1 m	-0.8 m
9	3.7	2.6
10	3.6	2.6
11	88.2 m	4.9
12	0.5	
13	0.4 m	0.3
14	4.8	0.3
15	4.9	4.9
16	2.5	2.5
17	0.7 m	2.4 m
18	4.9	4.6

IC403

	REC (V)	PLAY (V)
1	3.4	3.4
2	4.7	-0.4 m
3	-2.5	-0.4 m
4	3.4	3.4
5	4.9	4.6
6	-2.7	-1.6
7	4.3	4.2
8	-2.7 m	-1.6 m
9	2.9	2.9
10	-2.7 m	21.7 m
11	3.6	3.5
12	-2.4 m	
13	3.6	3.5
14	1602.4 m	
15	0.8 m	
16	0.6	0.6
17	4.7	4.8
18	4.7	4.8

IC404

	REC (V)	PLAY (V)
1	9.2	9.2
2	1.1 m	1.5 m
3	4.0	4.0
4	3.3	3.3
5	3.2	3.2
6	2.1	2.1
7	1.6	1.6
8	4.74	4.75

IC405

	REC (V)	PLAY (V)
1	0.7 m	-1.6 m
2	5.0	5.0
3	5.0	5.2 m
4	0.7 m	-1.9 m
5	0.8 m	0.4
6	0.7 m	-1.6 m
7	5.0	5.0
8	0.7 m	-1.6 m
9	5.0	5.0
10	0.8 m	0.4
11	5.0	5.0
12	4.0	0.4
13	5.0	5.0
14	5.0	4.5
15	0.7 m	-0.7 m
16	5.0	5.0

IC406

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.8	7.8
3	4.4	4.4
4	7.1	7.1
5	0.2 m	-3.4 m
6		
7	7.8	7.8
8		

IC407

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.8	7.8
3	88.3 m	4.9
4	7.2	7.2
5	0.6 m	-2.0 m
6		
7	7.8	7.8
8		

IC408

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.8	7.8
3	4.4	4.4
4	7.1	7.2
5	0.2 m	-2.4 m
6		
7	7.8	7.8
8		

IC409

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.8	7.8
3	0.6	0.6
4	7.1	7.1
5	0.6 m	-1.0 m
6		
7	7.8	7.8
8		

IC410

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.8	7.8
3	88.3 m	4.9
4	7.1	7.1
5	0.3 m	-3.4 m
6		
7	7.8	7.8
8		

IC411

	REC (V)	PLAY (V)
1		
2		
3		
4		
5	0.9 m	-0.7 m
6	0.9 m	0.4 m
7	0.4 m	-1.1 m
8		
9		
10		0.6
11		0.5
12	5.0	4.6
13	5.0	5.0
14	5.0	5.0

IC412

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.8	7.8
3	0.2	0.2
4	7.1	7.1
5	-0.4 m	-0.6 m
6		
7	7.8	7.8
8		

IC413

	REC (V)	PLAY (V)
1	11.9	11.9
2	7.7	7.8
3	88.4 m	4.9
4	7.1	7.1
5	0.6 m	-2.0 m
6		
7	7.8	7.8
8		20.0

IC415

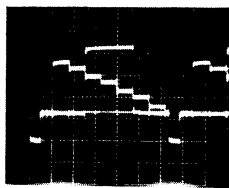
	REC (V)	PLAY (V)
1	11.9	11.9
2	7.7	7.8
3	4.8	4.8
4	7.1	7.1
5	0.6 m	-2.4 m
6		
7	7.8	7.8
8		

IC416

	REC (V)	PLAY (V)
1	6.0	5.9
2	5.8	5.8
3	4.0	4.0
4		
5	1022.7 m	1016.7 m
6	11.9	11.9
7	6.4	6.4
8	6.6	6.6

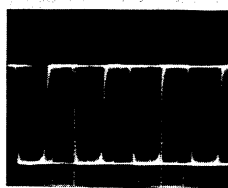
VIDEO WAVEFORMS

[W1] TP201 (EE)
Y.OUT



0.5V/div
10μS/div

[W7] TP206 (VHS REC)
REC Y FM



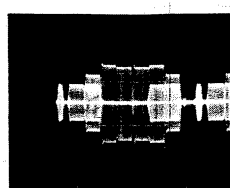
0.2V/div
0.1μS/div

[W13] CN201 ① Pin (EE)
INPUT VIDEO SIGNAL



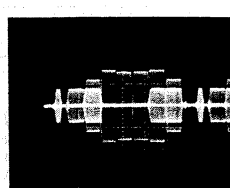
0.2V/div
10μS/div

[W15] TP410 (EE)
CHROMA IN (S)



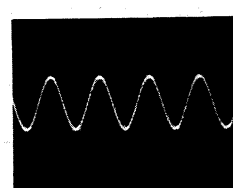
0.2V/div
10μS/div

[W17] CN203 ④ Pin (REC)



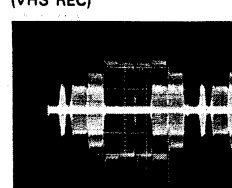
0.5V/div
10μS/div

[W19] 4.43 MHz B.P.F



0.1V/div
0.1μS/div

[W21] CN211 ① Pin
REC CHROMA
(VHS REC)



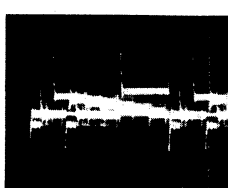
50mV/div
10μS/div

[W2] TP202 (EE)
Y.IN



0.2V/div
10μS/div

[W8] TP205 (S-VHS REC)
MAIN EMPH.OUT



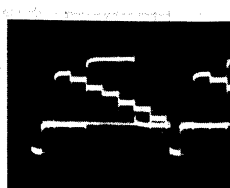
0.2V/div
10μS/div

[W14] TP409 (EE)
LUMA IN (S)



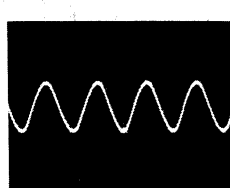
0.2V/div
10μS/div

[W16] CN 203 ① Pin (REC)



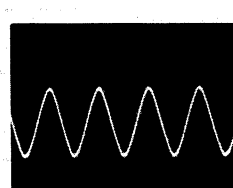
0.5V/div
10μS/div

[W18] CN204 ① Pin
fsc 4.43 MHz



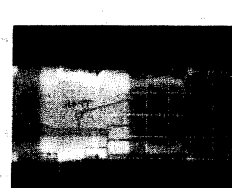
0.2V/div
0.1μS/div

[W20] Q420 Emitter



0.1V/div
0.1μS/div

[W22] TP408 (VHS PB)
PB-C (ENVELOPE)



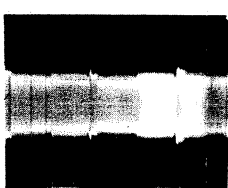
50mV/div
5mS/div

[W3] TP203 (S-VHS REC)



0.1V/div
10μS/div

[W9] Q235 Base
S-VHS PB RF EQ OUT
(S-VHS PB)



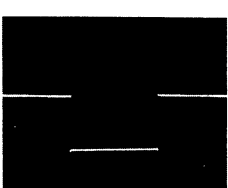
0.1V/div
5mS/div

[W4] IC201 ② Pin
(S-VHS REC)



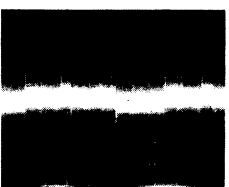
0.1V/div
10μS/div

[W10] TP208 (REC/PB)
RF SW PLS



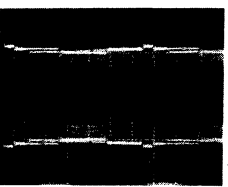
2V/div
5mS/div

[W5] TP214
LINE NOISE CANCELLER
(VHS PB)



50mV/div
10μS/div

[W11] CN210 ① Pin (REC Y)
(VHS REC)



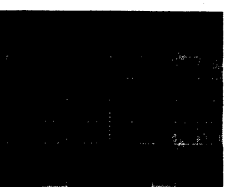
0.1V/div
10μS/div

[W6] IC205 ① Pin
(VHS PB)



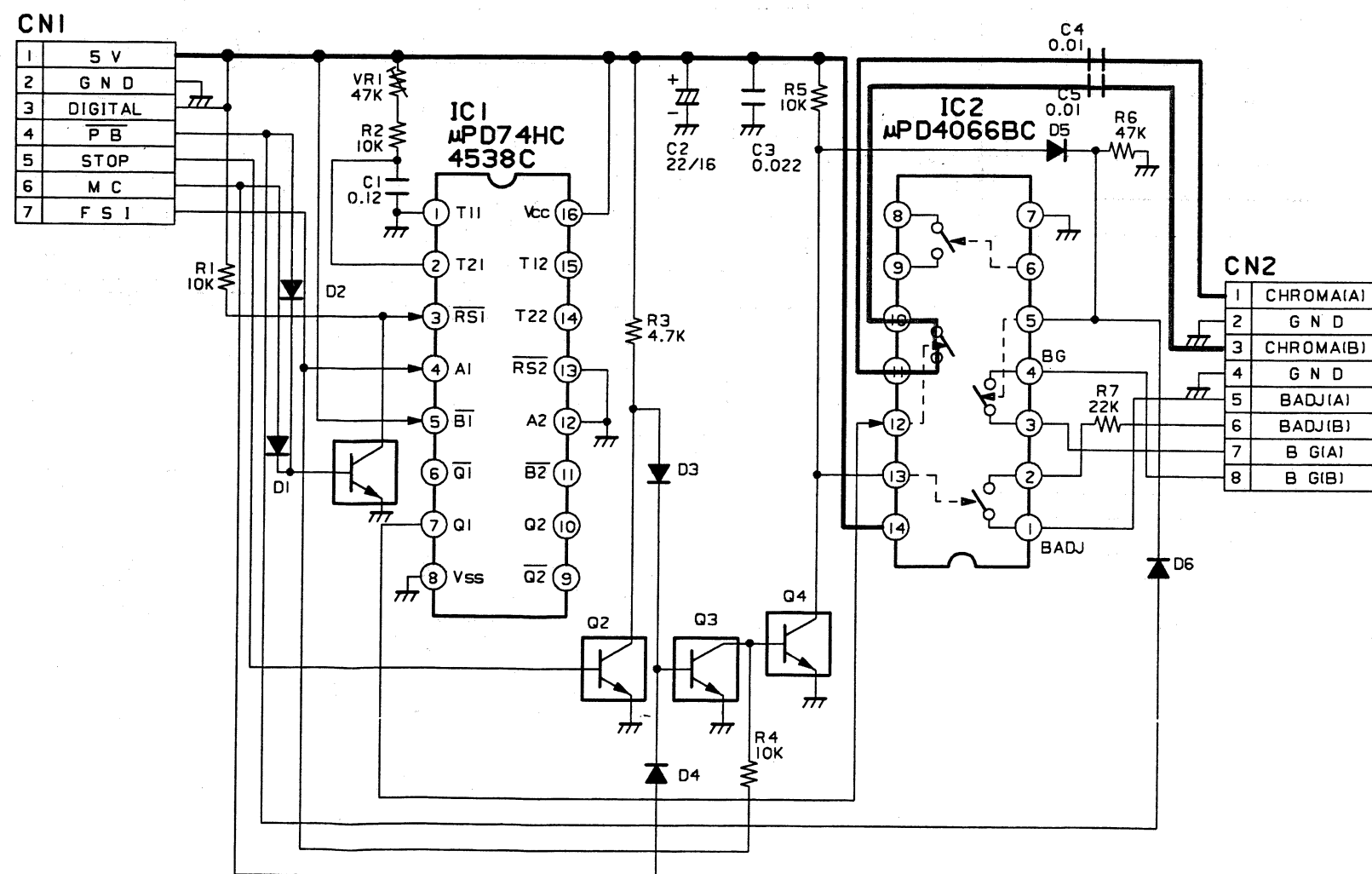
0.1V/div
10μS/div

[W12] TP213 PB-Y (AGC OUT)
(VHS PB)

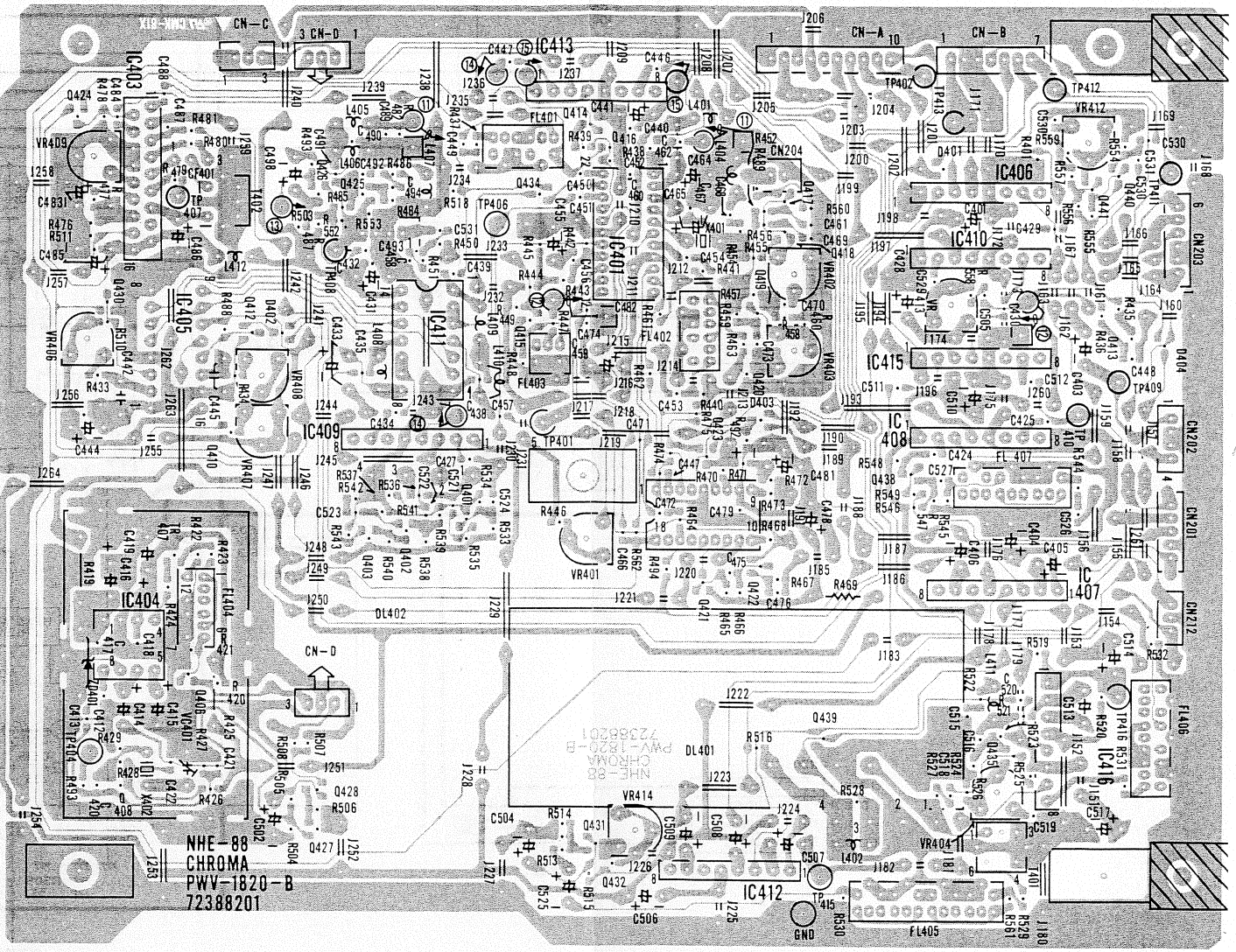
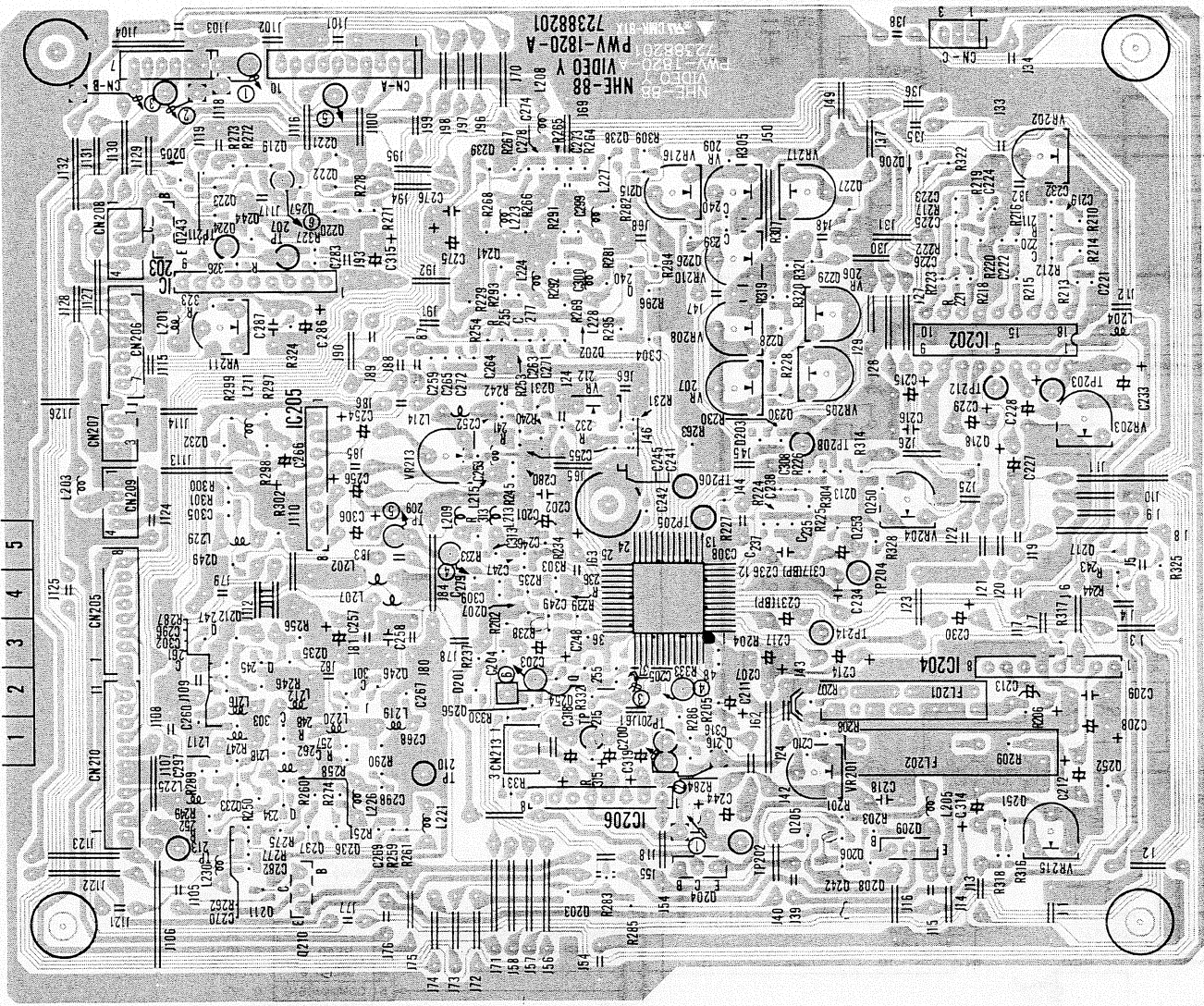


50mV/div
5mS/div

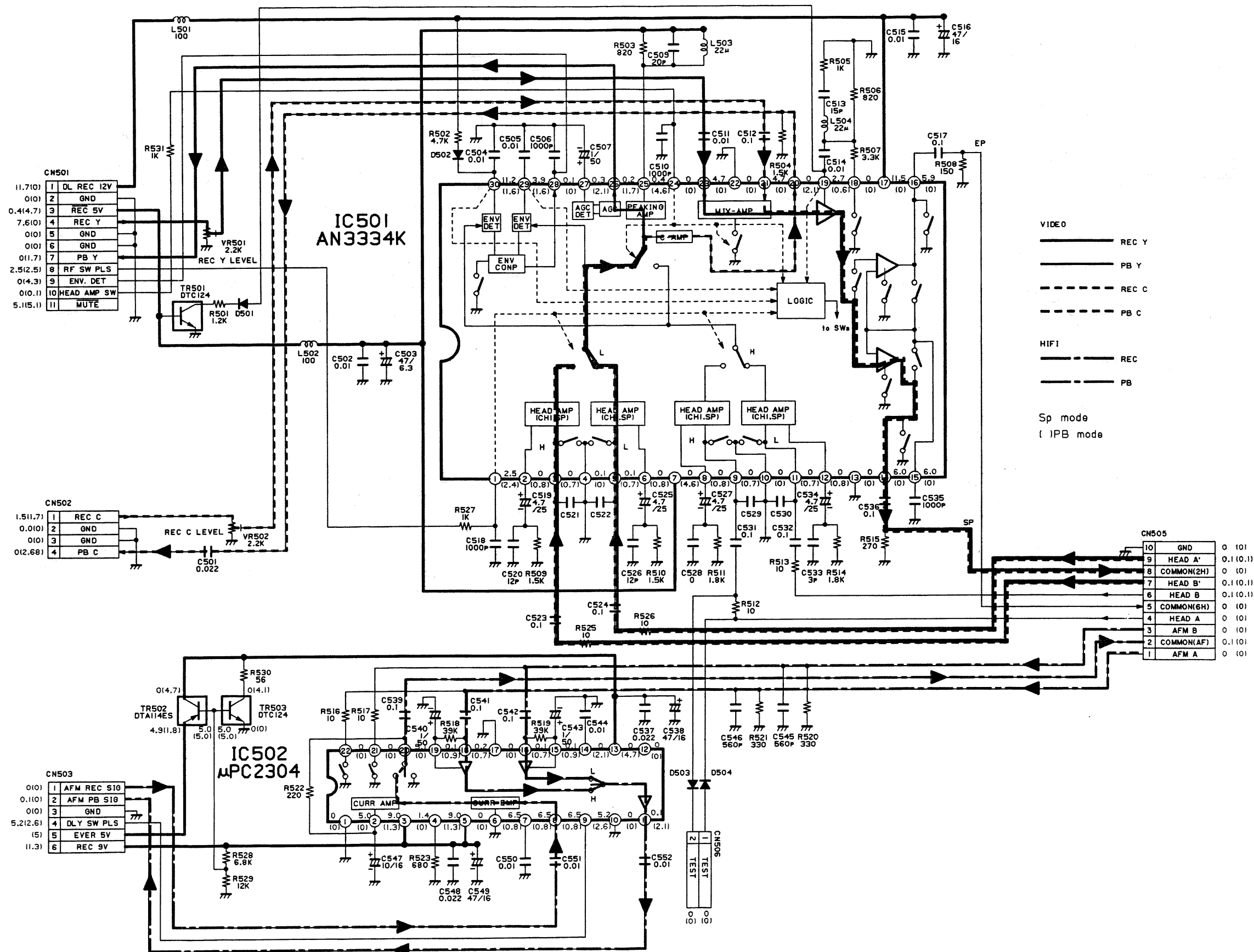
CHROMA. CTL



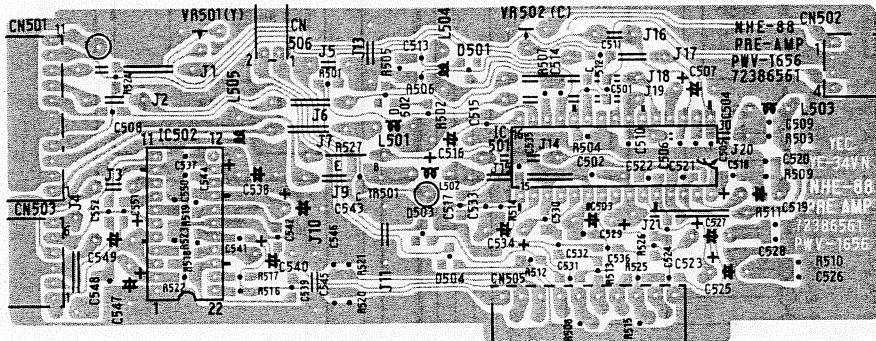
2-8. VIDEO CIRCUIT BOARD (SOLDER SIDE)



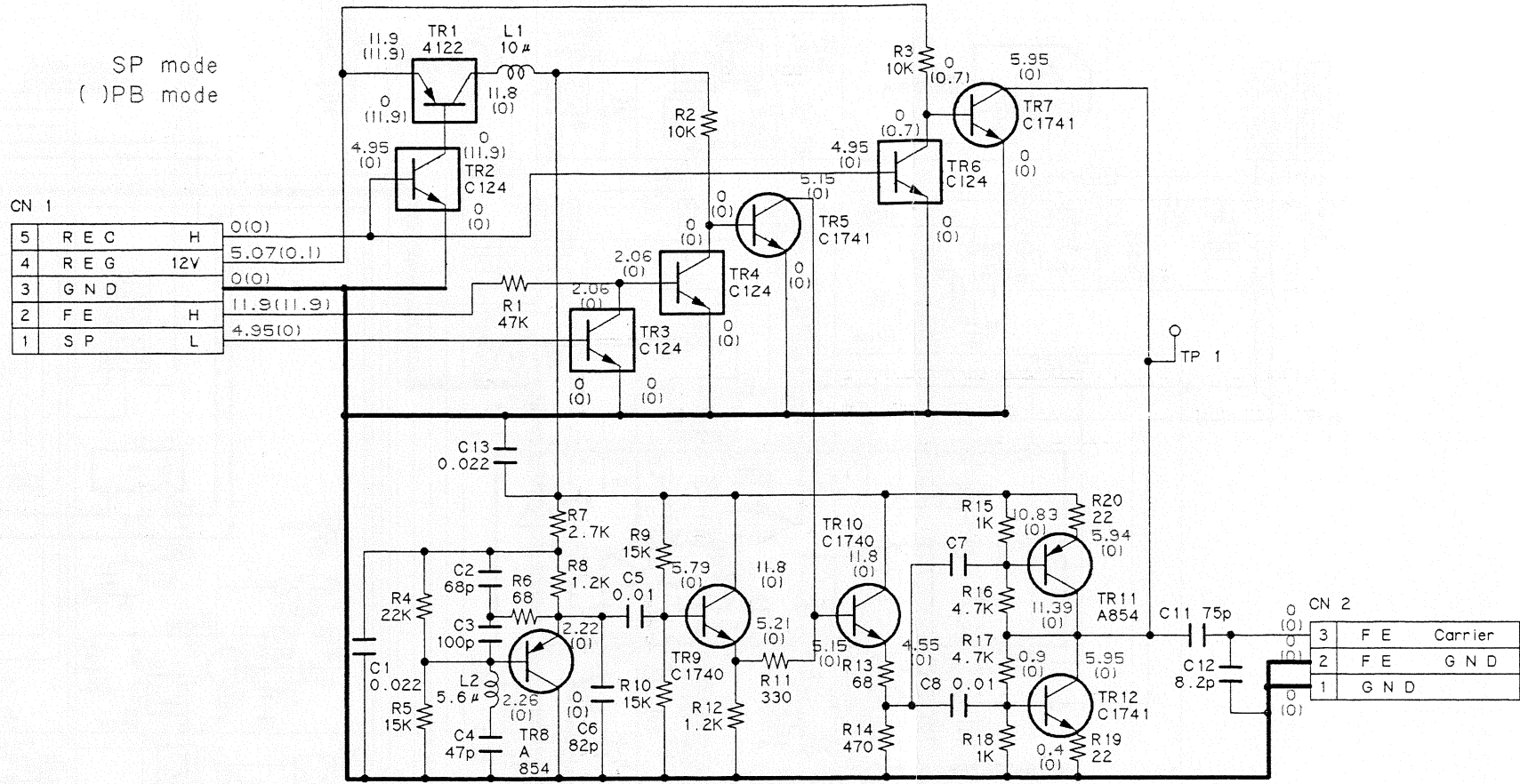
2-9. PRE AMP SCHEMATIC DIAGRAM



2-10. PRE AMP CIRCUIT BOARD (SOLDER SIDE)

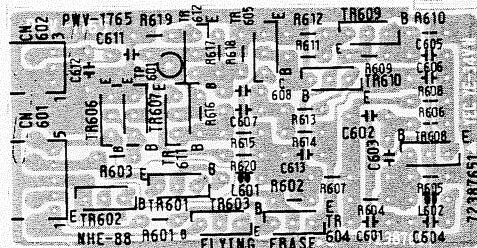


2-11. FLYING ERASE SCHEMATIC DIAGRAM

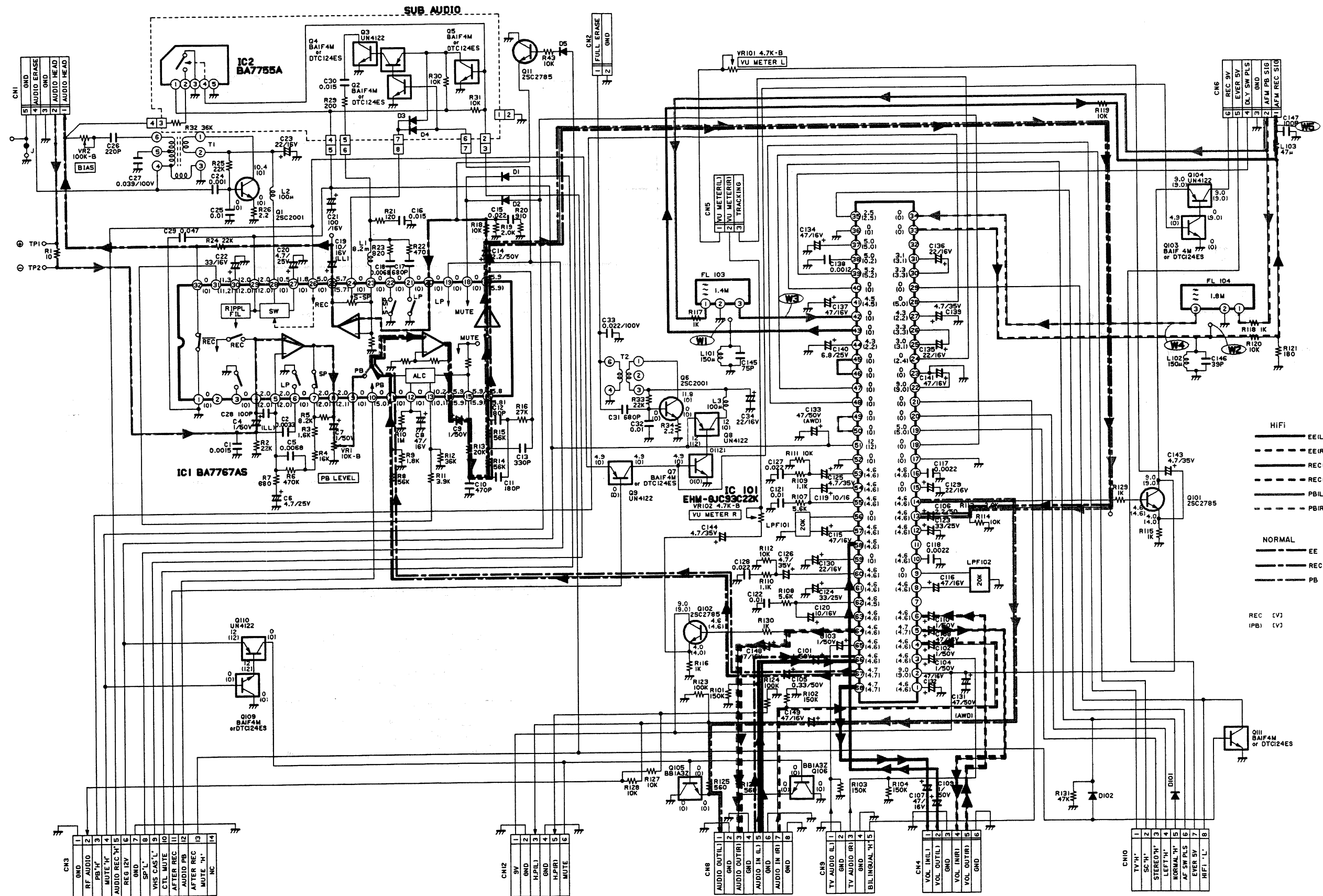


Parts No.600~

2-12. FLYING ERASE CIRCUIT BOARD



2-13. AUDIO SCHEMATIC DIAGRAM





4-33



Y VIDEO
C VIDEO
COMPO VIDEO

TO S/S
CH1
1 GND
2 OUTPUT Y
3 GND
4 OUTPUT C
5 GND
6 COMPO OUT
7 EVER 5V
8 Y/COMPO COMT
9 SECAM-H
10 REG 12V

TO JACK-TERM
CH2
1 S-OUT(Y)
2 GND
3 GND
4 S-OUT(C)

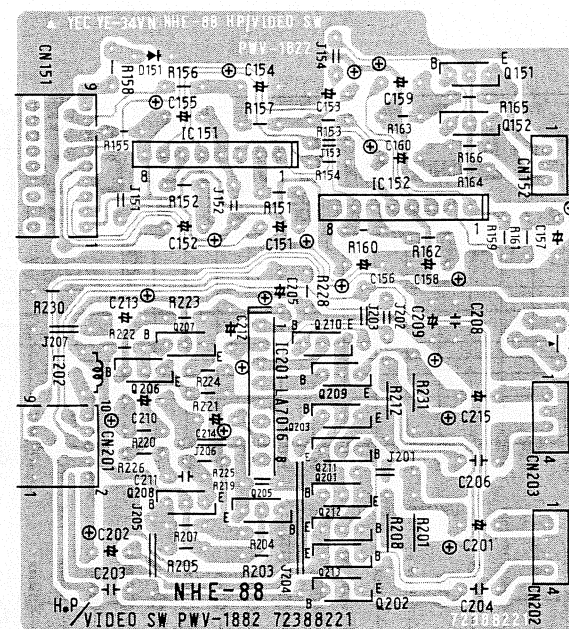
TO JACK-TERM
CH3
1 Y/COMPO OUT
2 GND
3 C OUT (2IPIN)
4 GND

UN4122

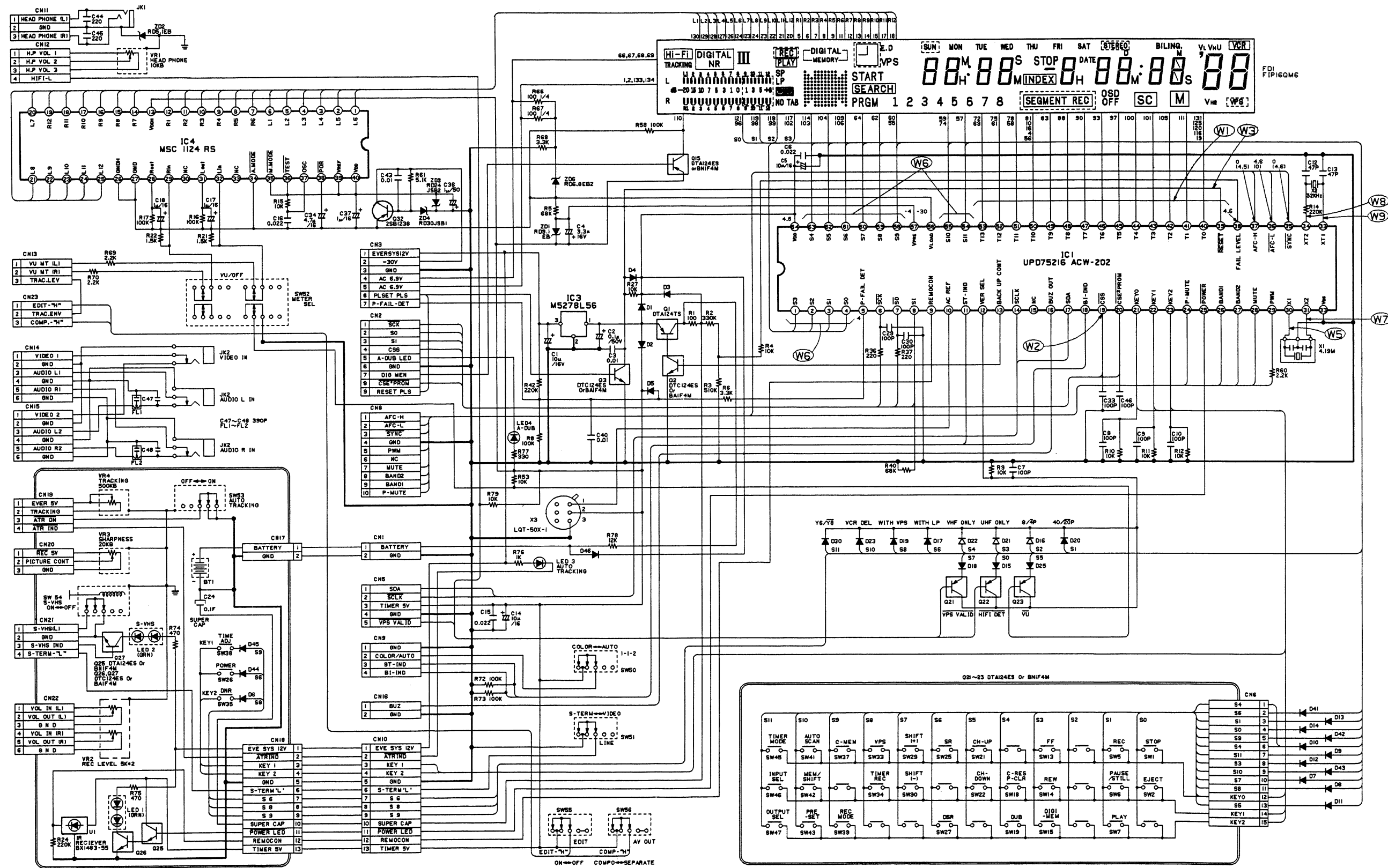
IC1 LA7016

No. 42

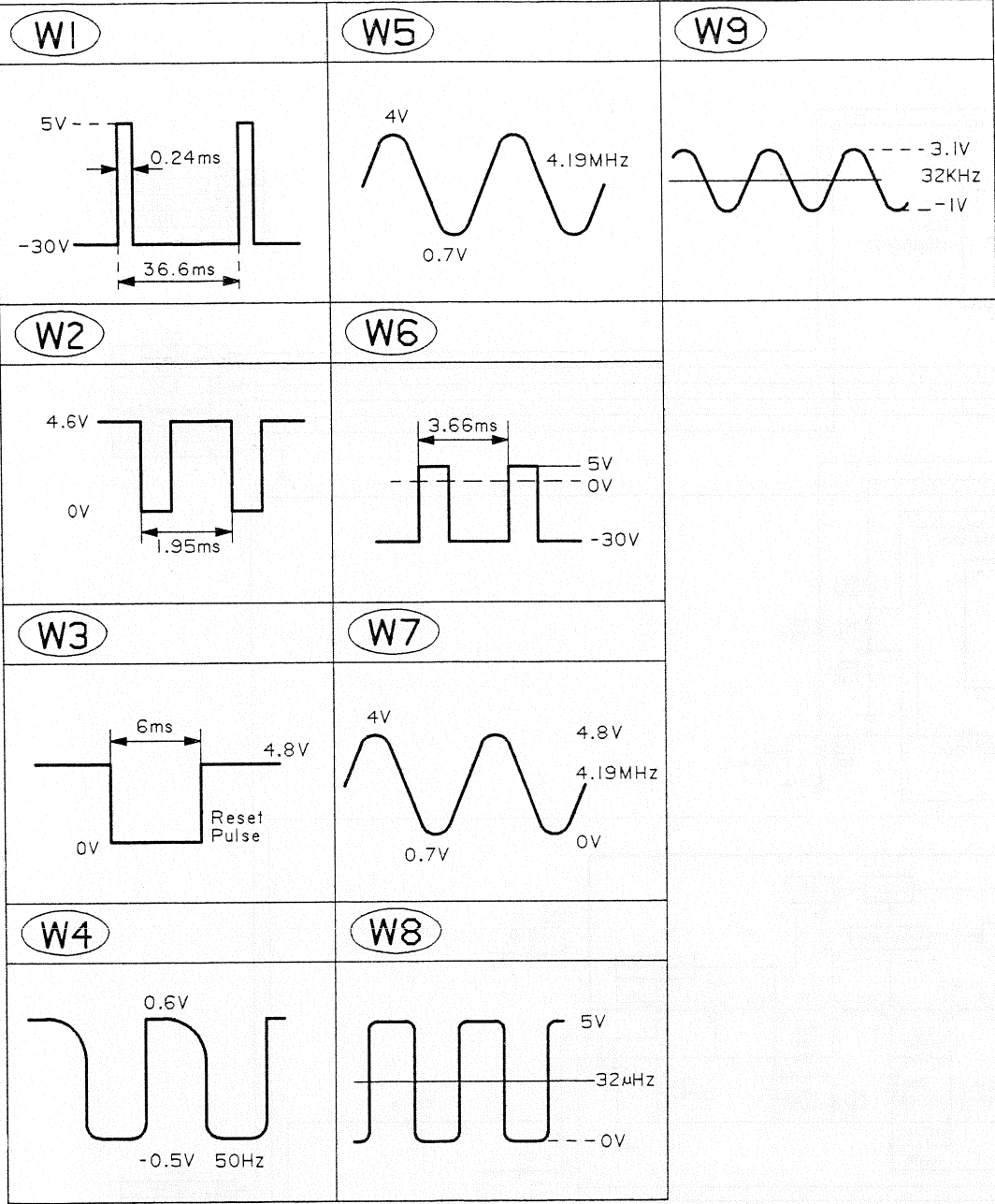
2-17. H.P/VIDEO SW CIRCUIT BOARD (SOLDER SIDE)



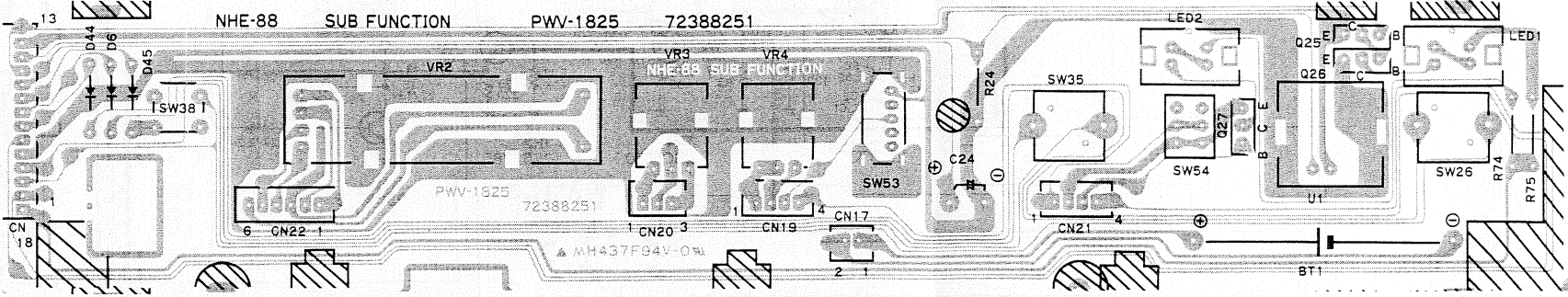
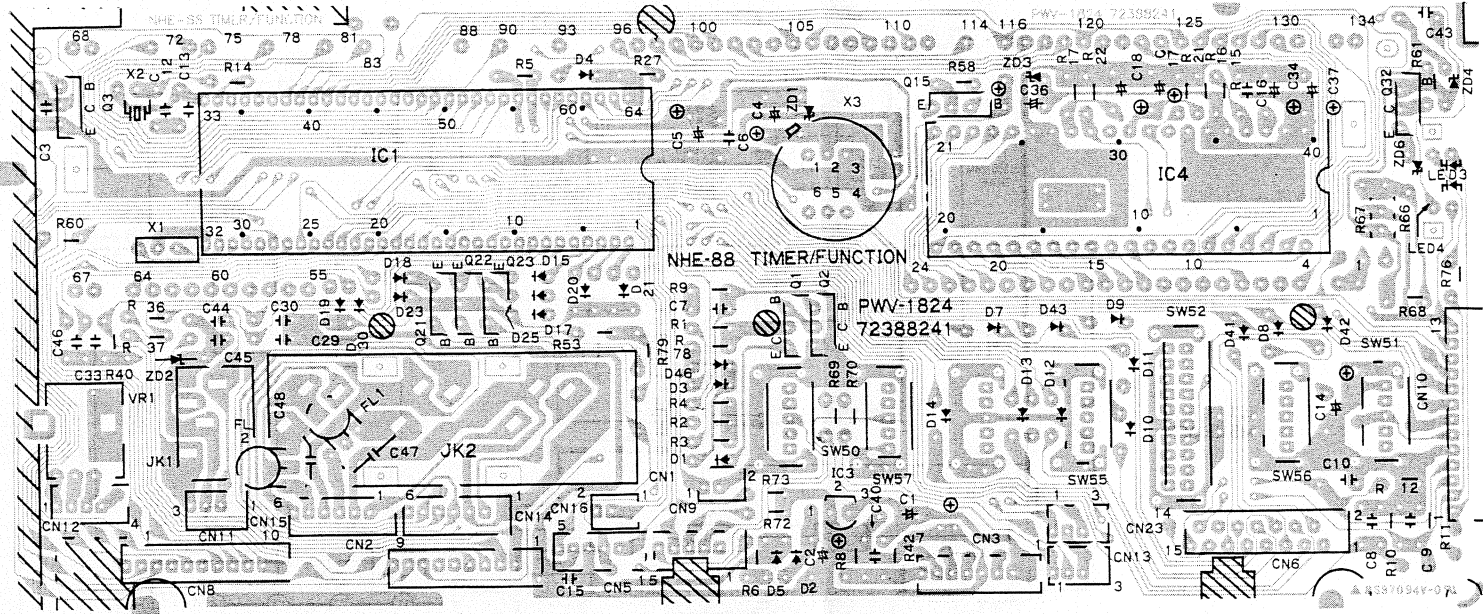
2-18. TIMER FUNCTION/SUB FUNCTION SCHEMATIC DIAGRAM

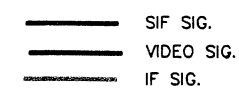


TIMER FUNCTION WAVEFORMS

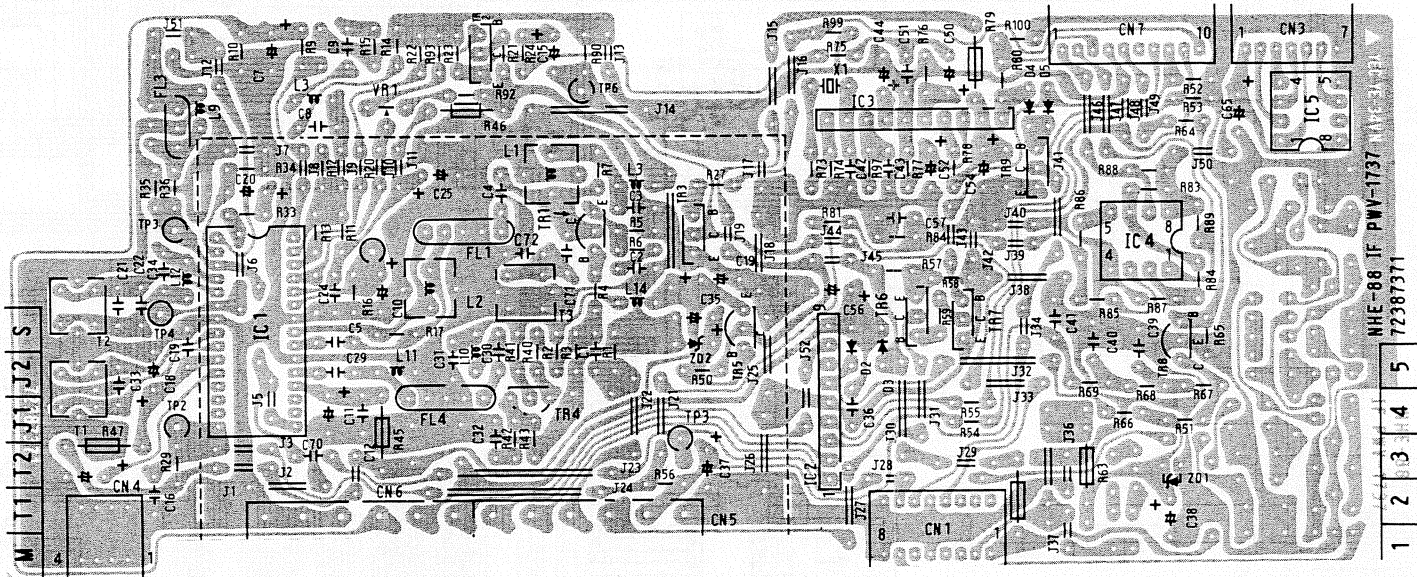


2-19. TIMER FUNCTION/SUB FUNCTION CIRCUIT BOARD (SOLDER SIDE)

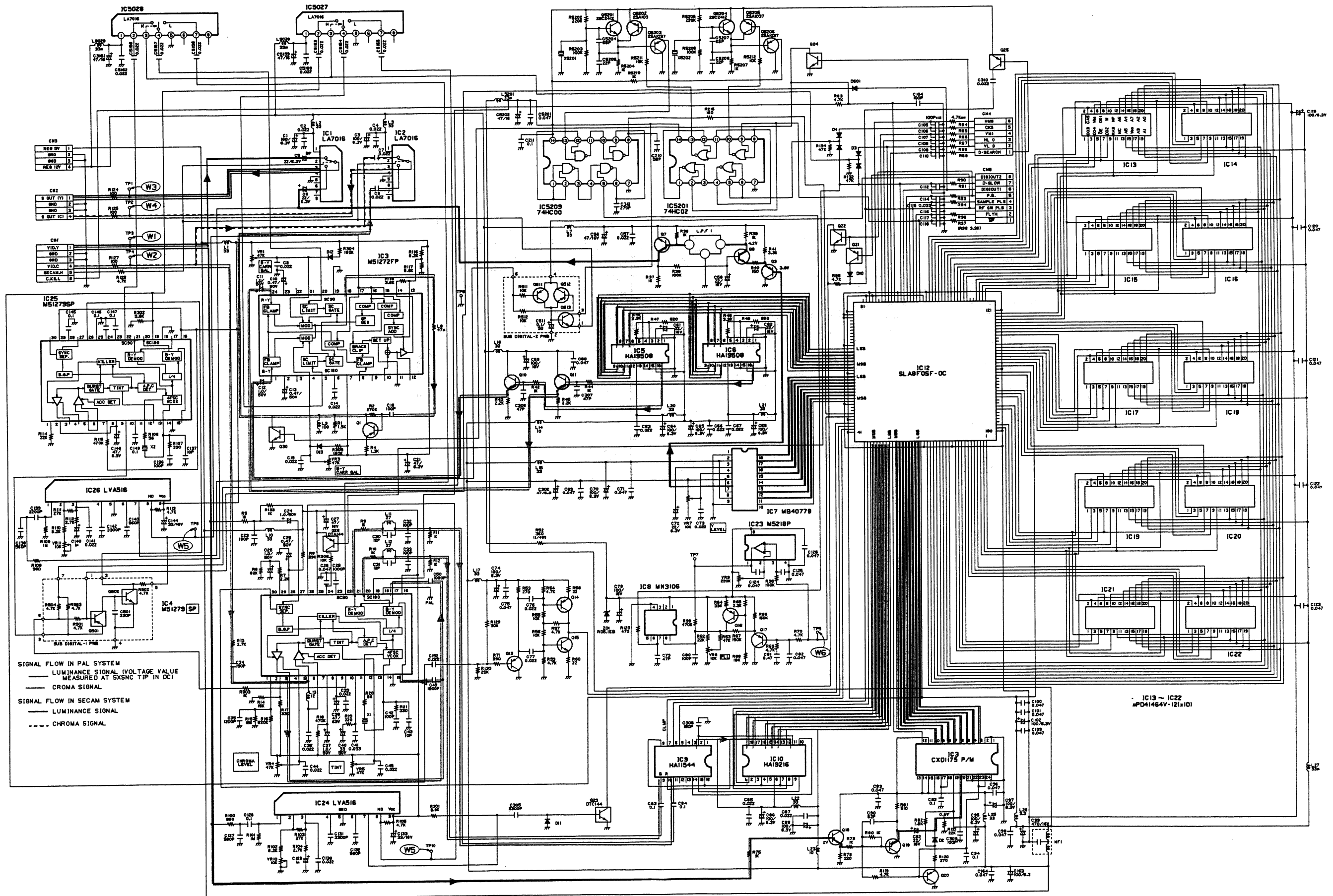




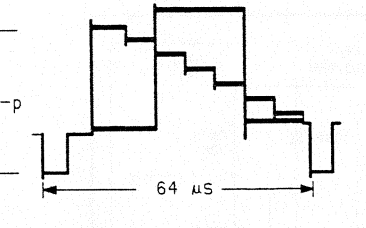
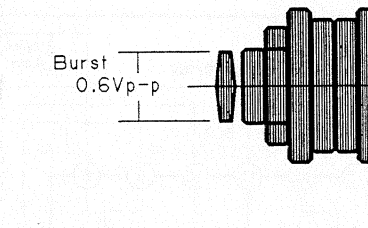
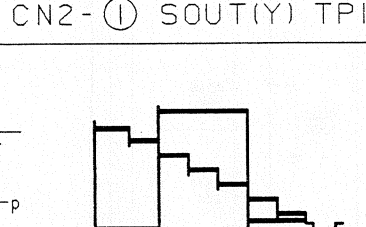
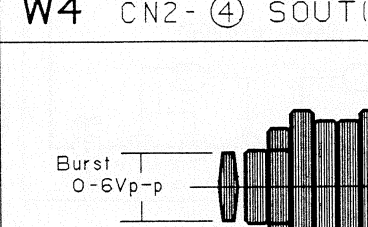
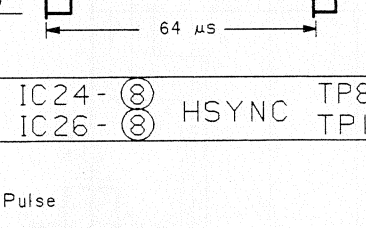
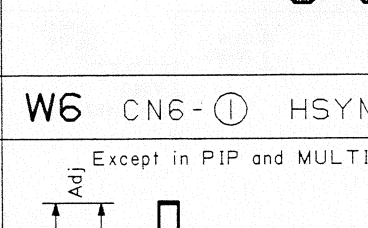
2-21. TUNER/IF CIRCUIT BOARD (SOLDER SIDE)



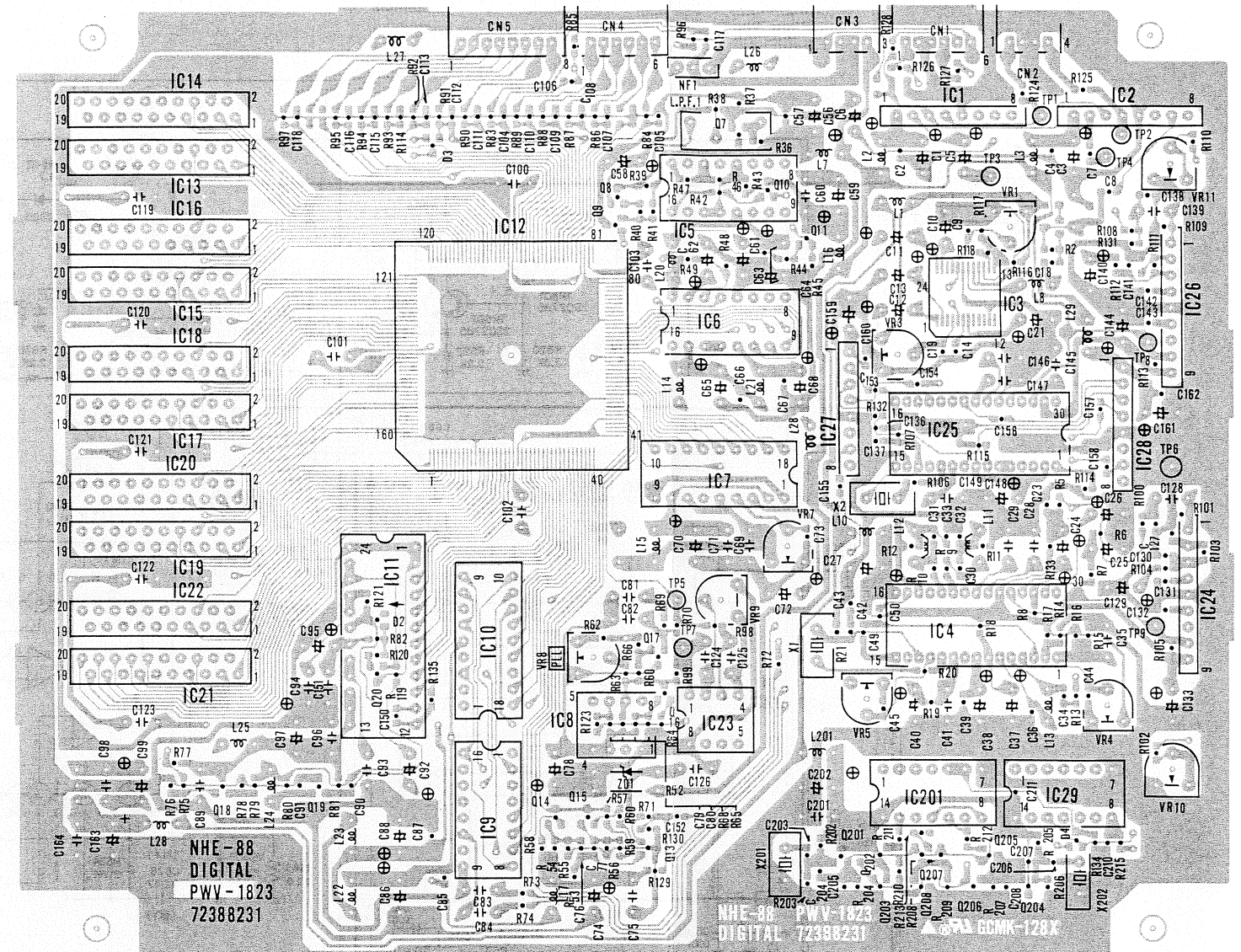
2-22. DIGITAL SCHEMATIC DIAGRAM



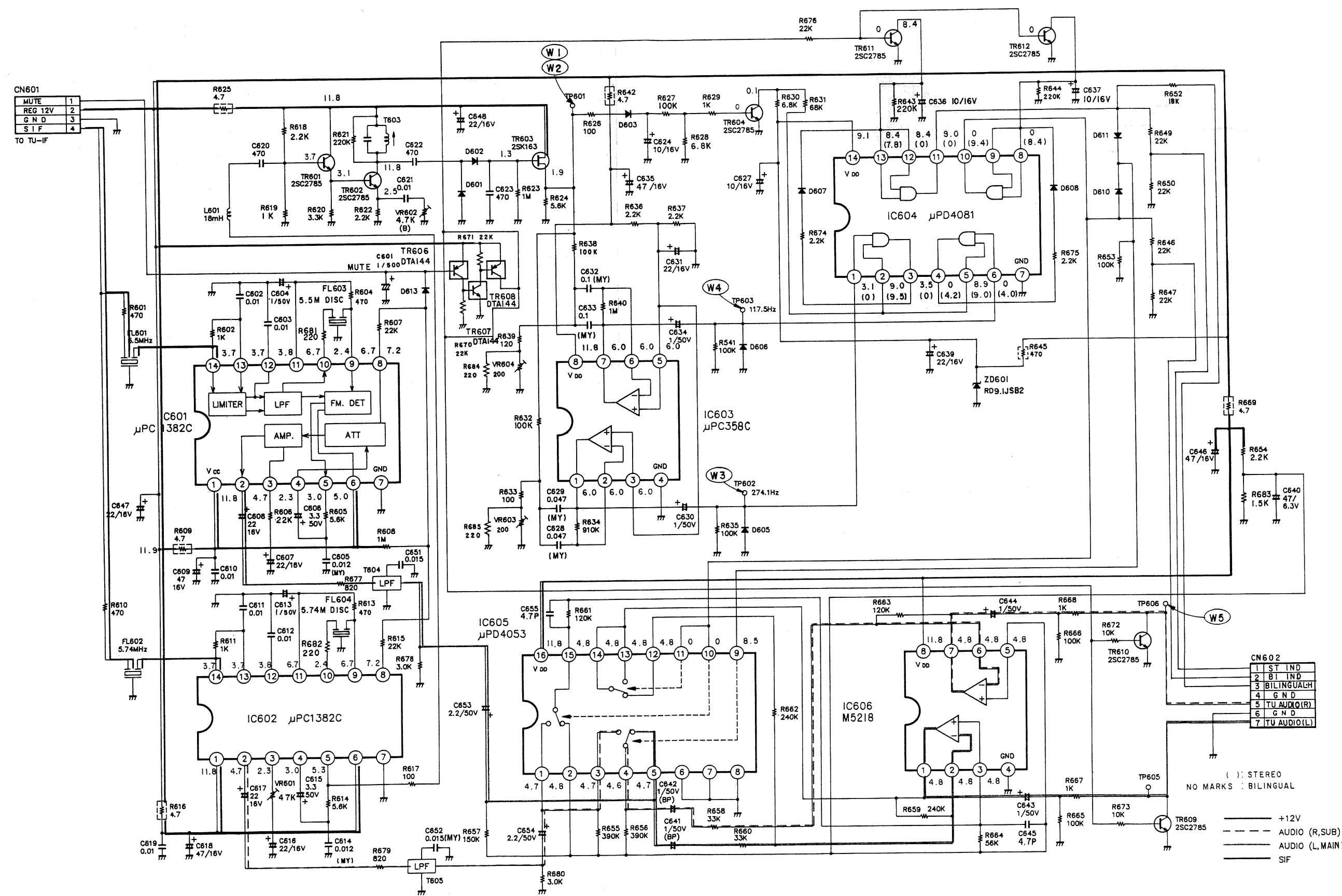
DIGITAL WAVEFORMS

<p>W1 CN1-① Video Y TP3</p> 	<p>W2 CN1-④ Video C TP4</p> 
<p>W3 CN2-① SOUT(Y) TP1</p> 	<p>W4 CN2-④ SOUT(C) TP2</p> 
<p>W5 IC24-⑧ HSYNC TP8 IC26-⑧ TP10</p> 	<p>W6 CN6-① HSYNC TP5</p> <p>Except in PIP and MULTI 4.7V DC</p> 

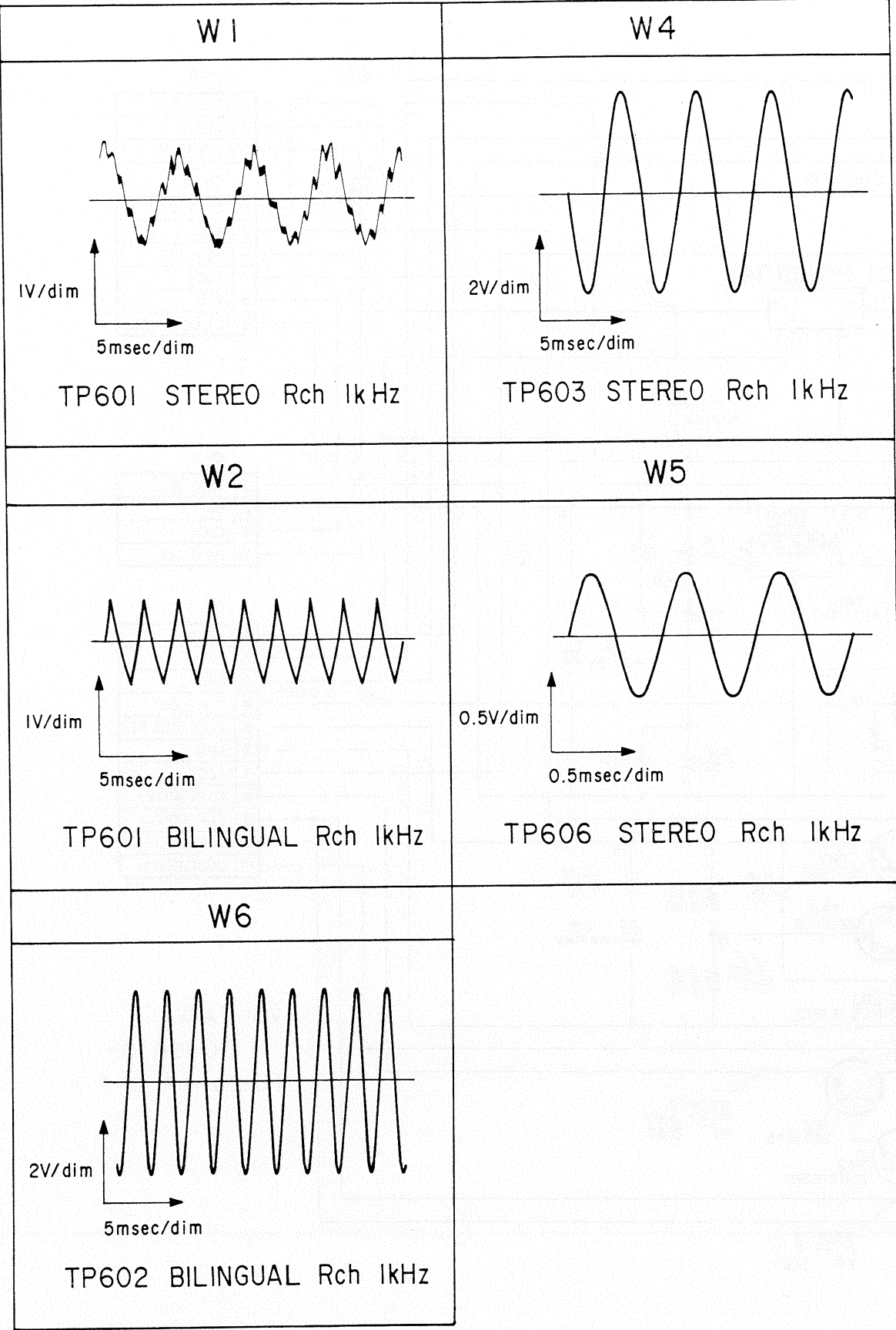
2-23. DIGITAL CIRCUIT BOARD (SOLDER SIDE)



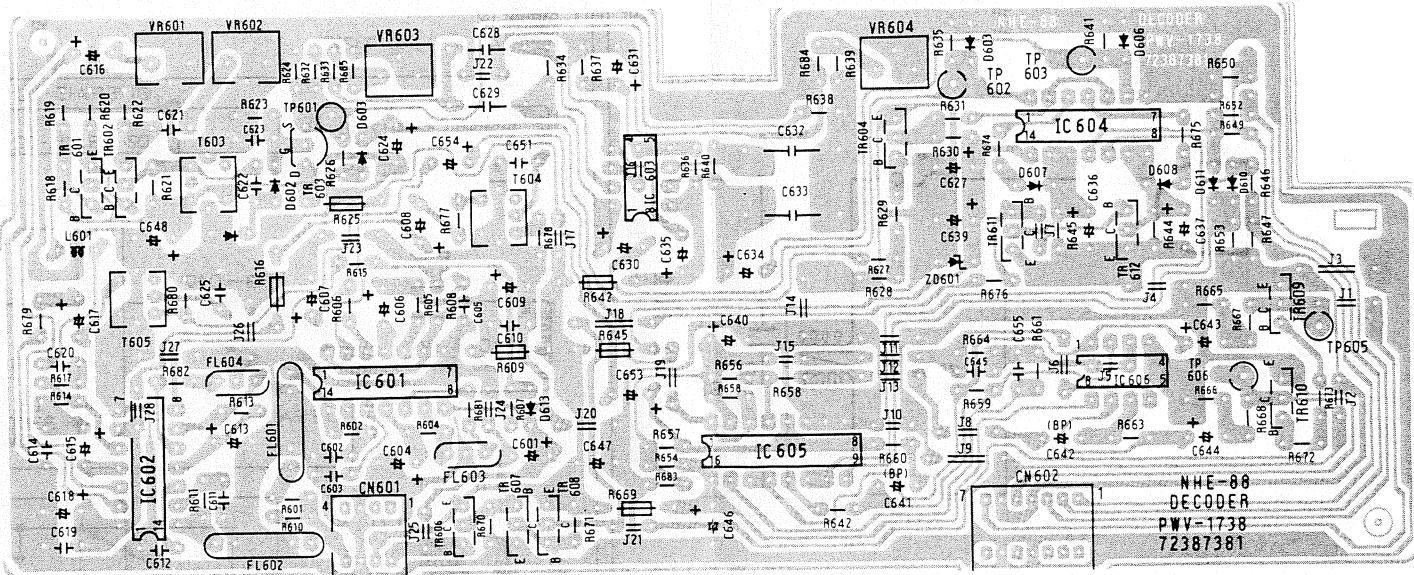
2-24. DECODER SCHEMATIC DIAGRAM



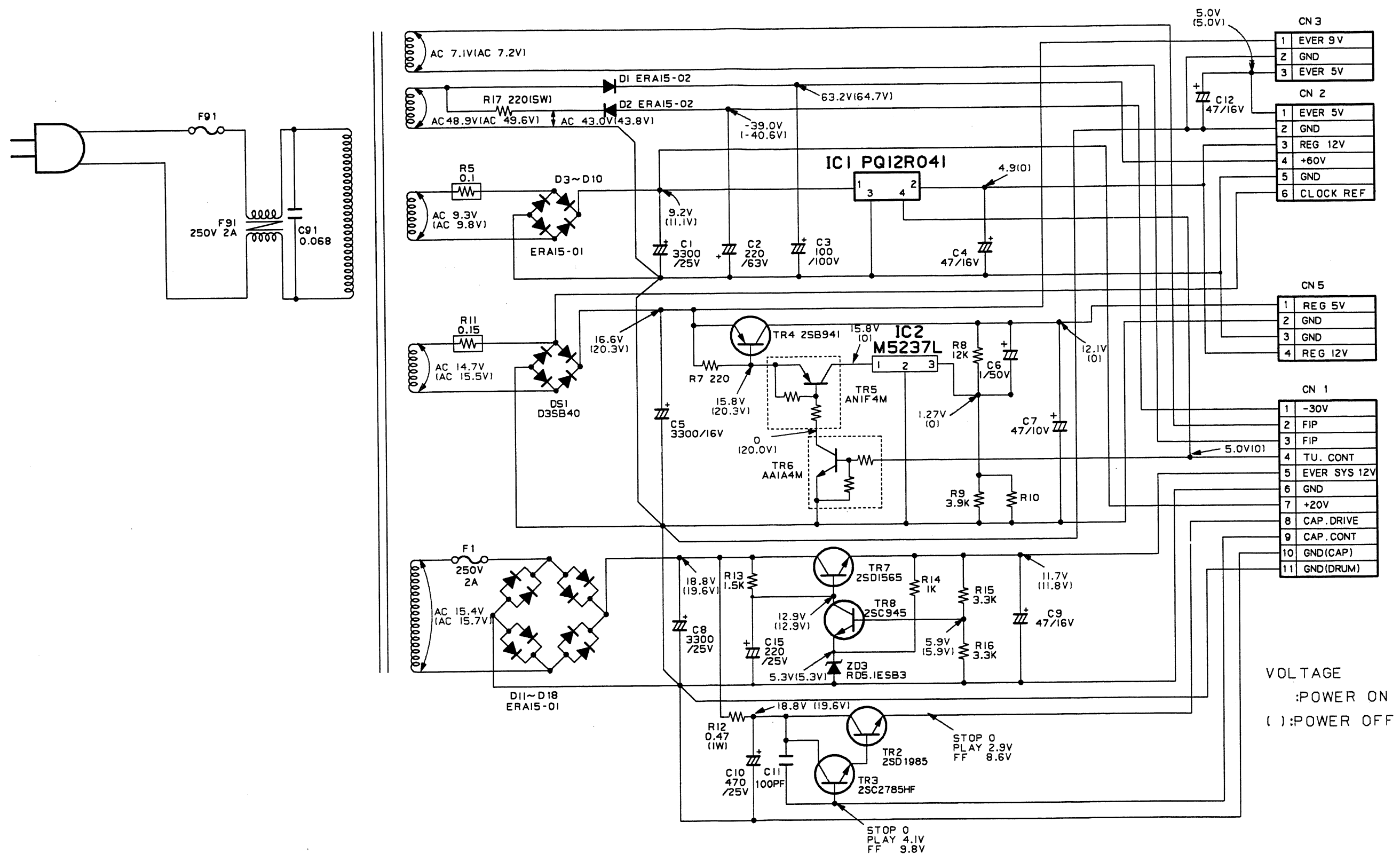
DECODER WAVEFORMS



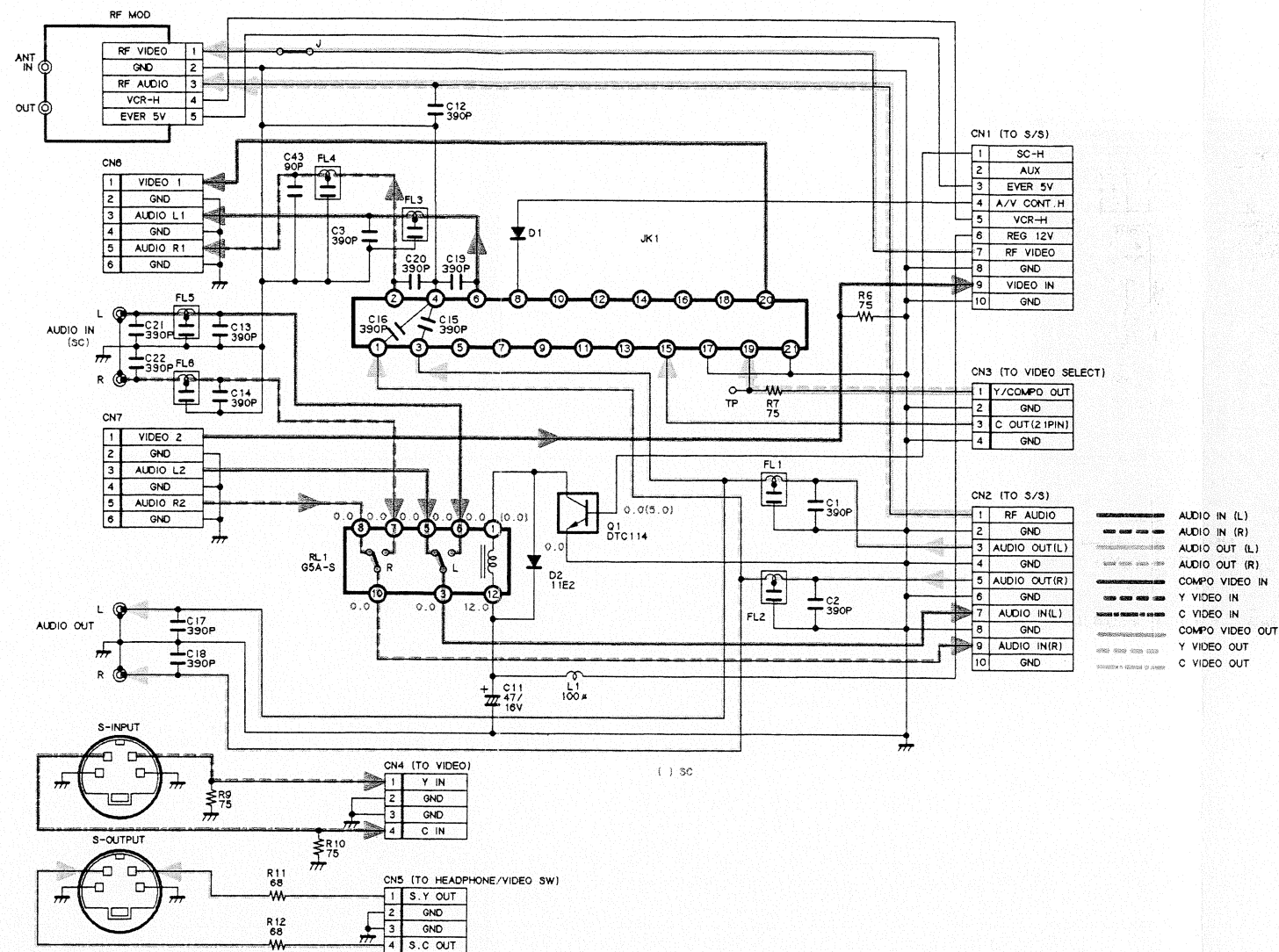
2-25. DECODER CIRCUIT BOARD (SOLDER SIDE)



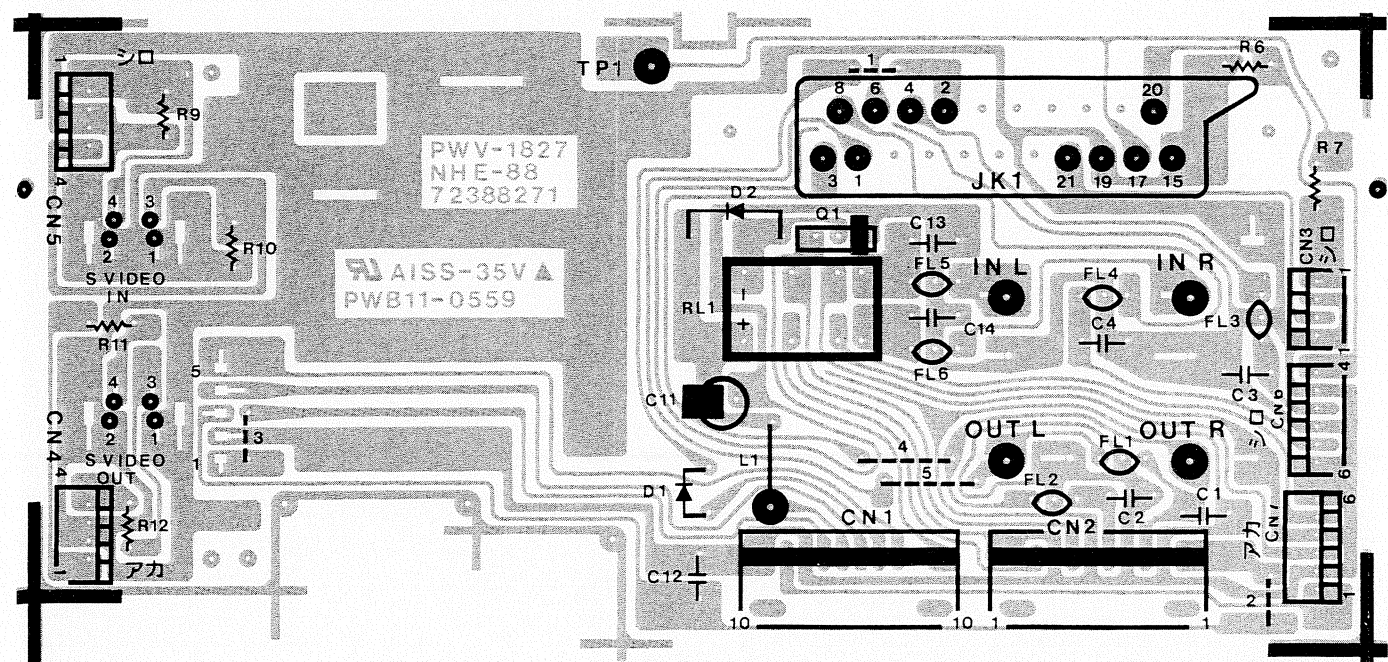
2.26 POWER/REGULATOR SCHEMATIC DIAGRAM



2-28. JACK TERMINAL SCHEMATIC DIAGRAM

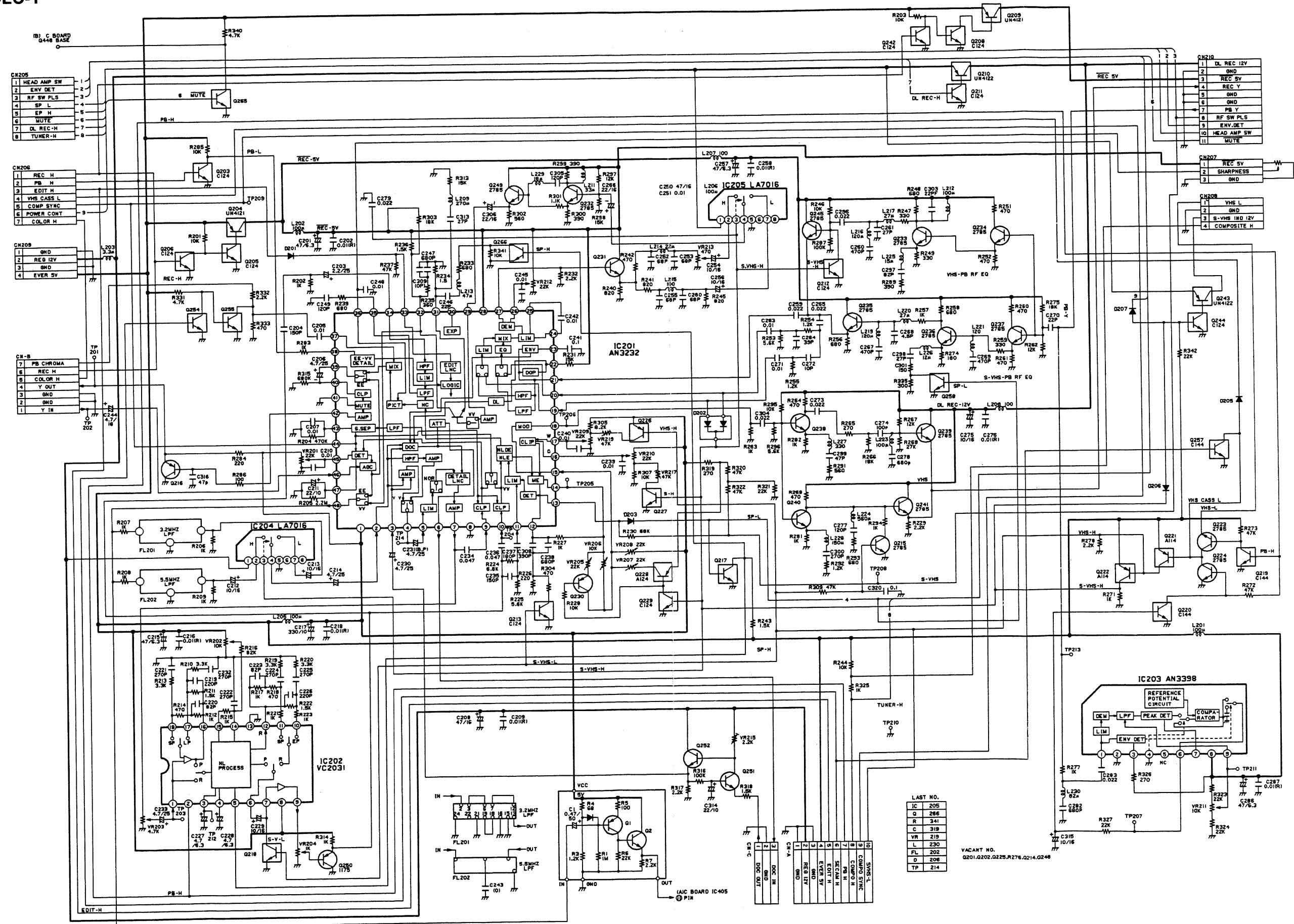


2-29. JACK TERMINAL CIRCUIT BOARD

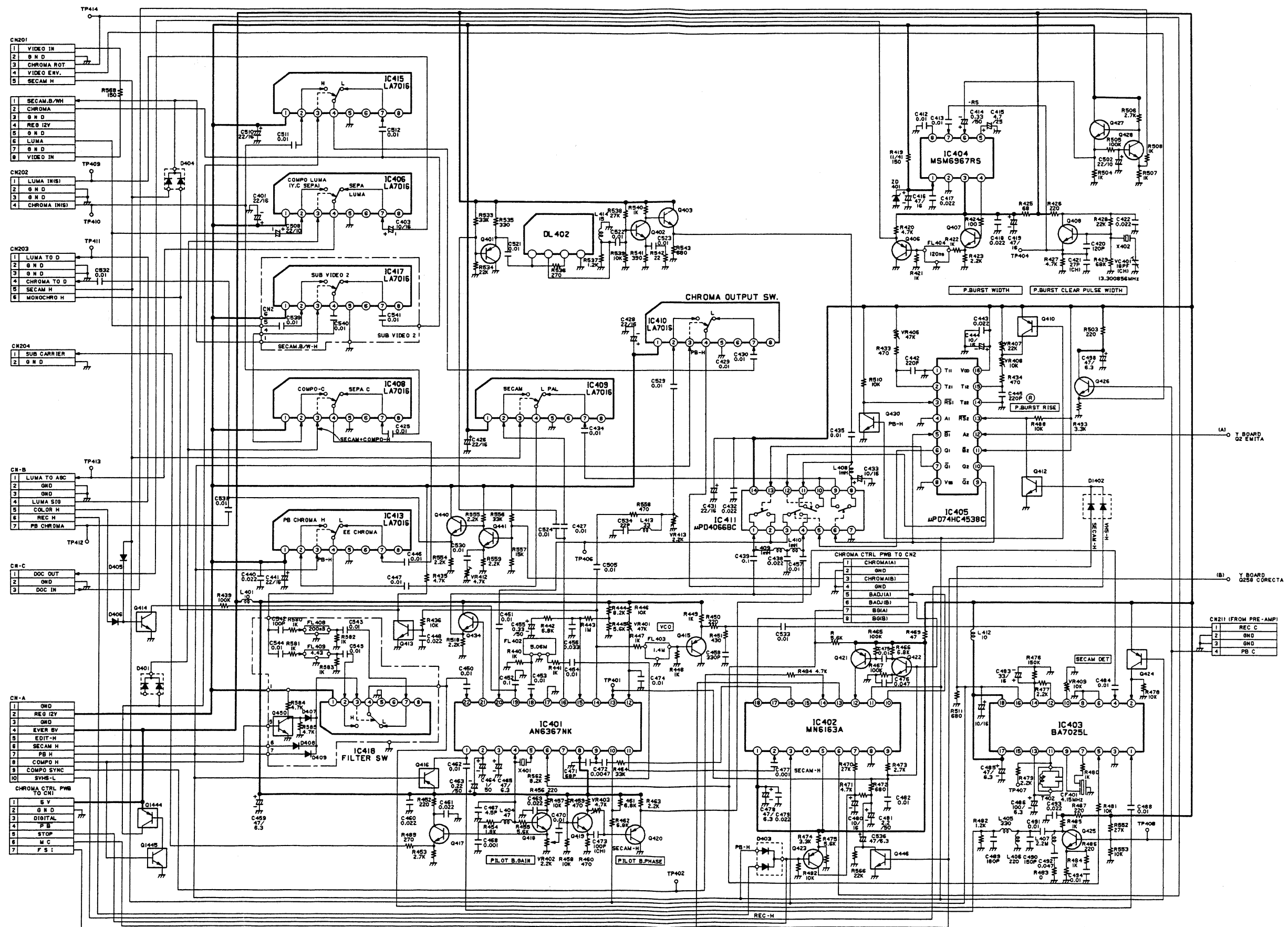


2-7. VIDEO SCHEMATIC DIAGRAM

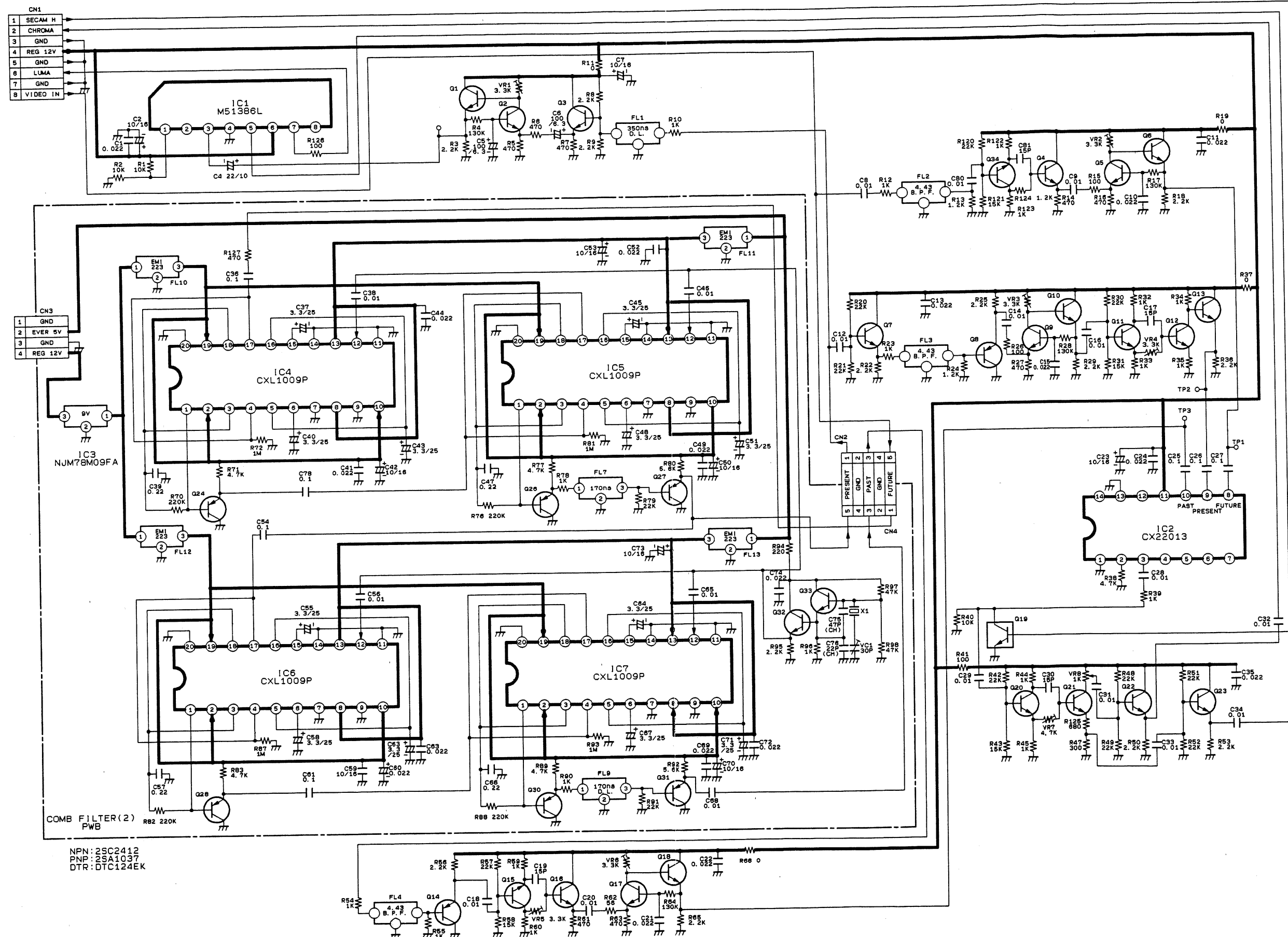
VIDEO-Y



VIDEO-C

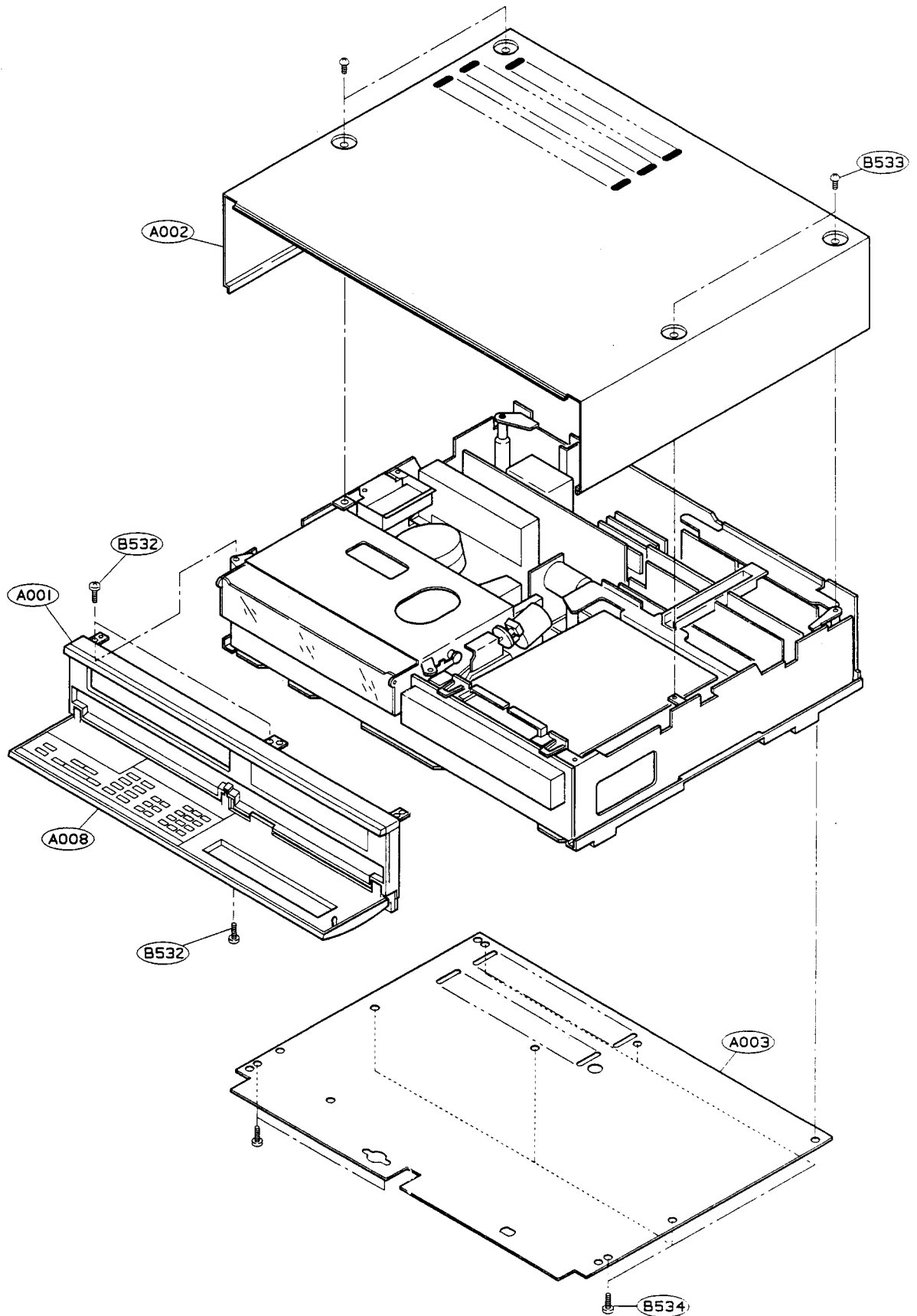


PAL 3LINE COMB FILTER

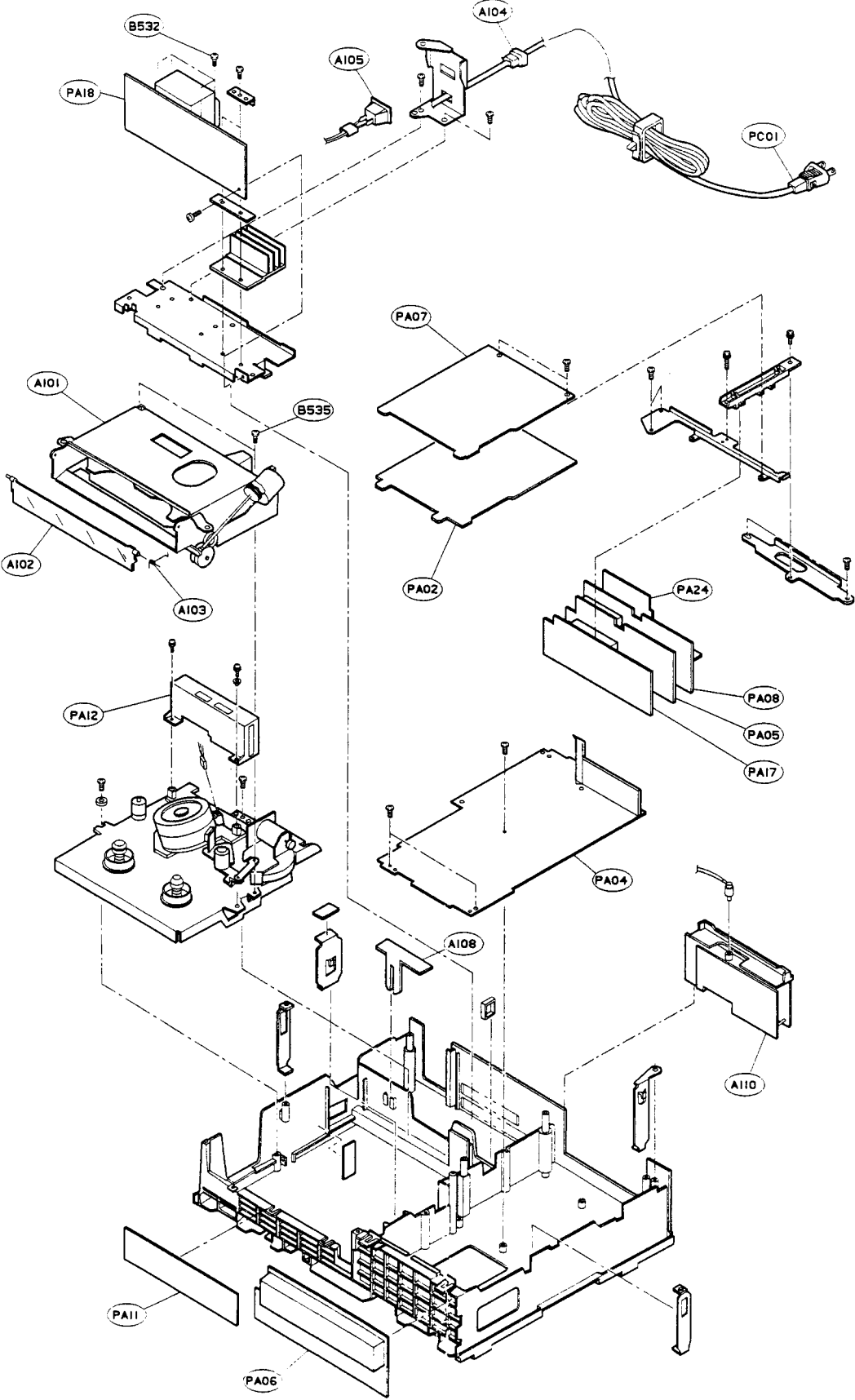


SECTION 5 EXPLODED VIEW

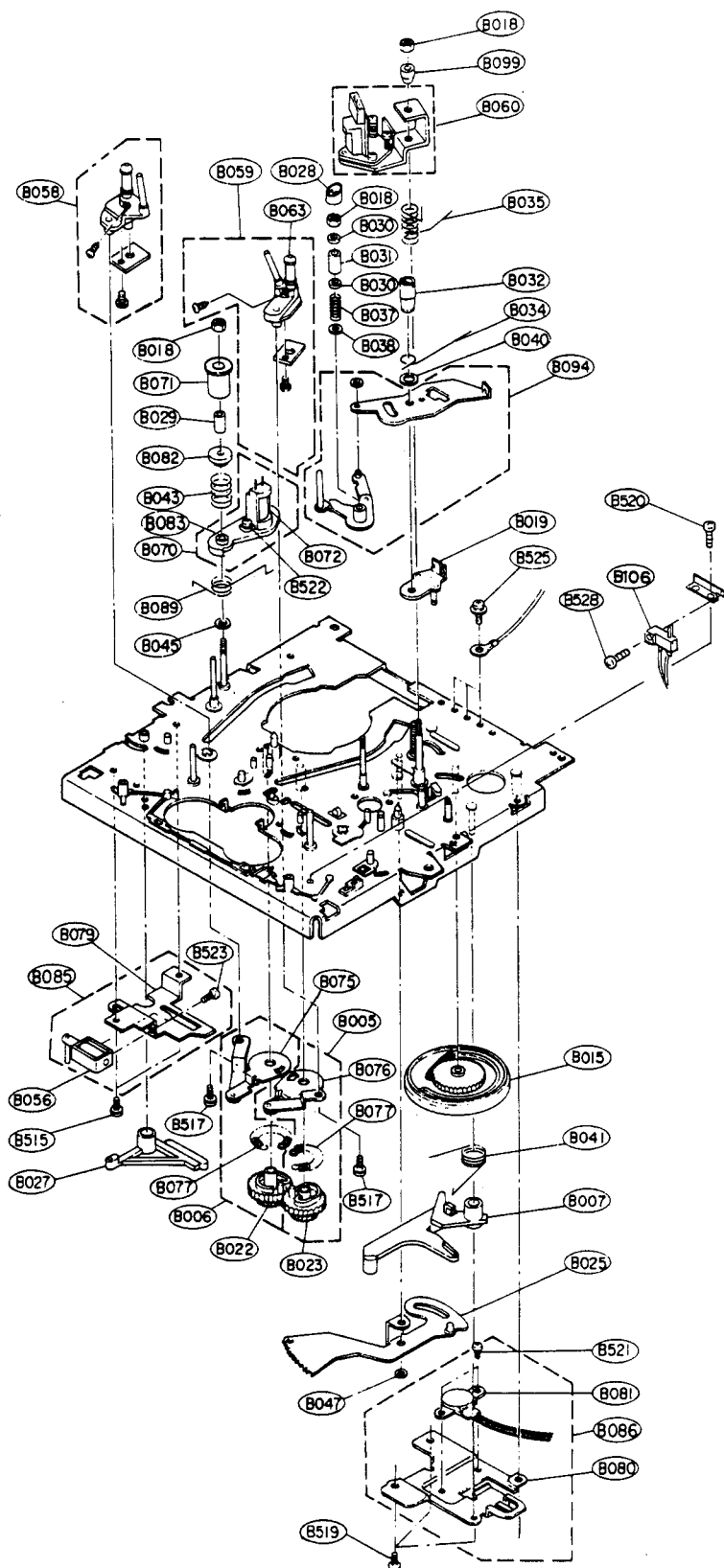
5-1. CABINET SECTION



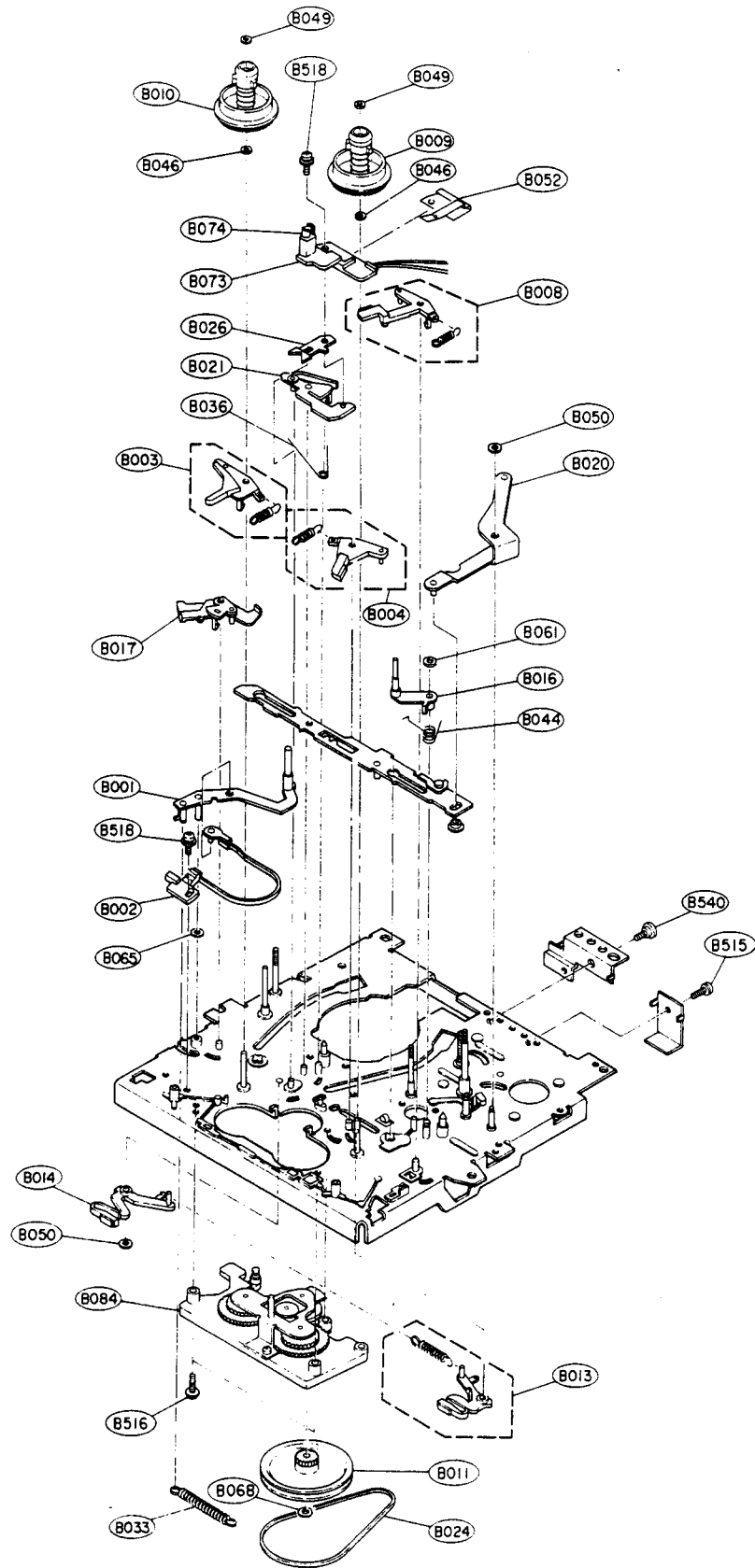
5-2. CHASIS SECTION



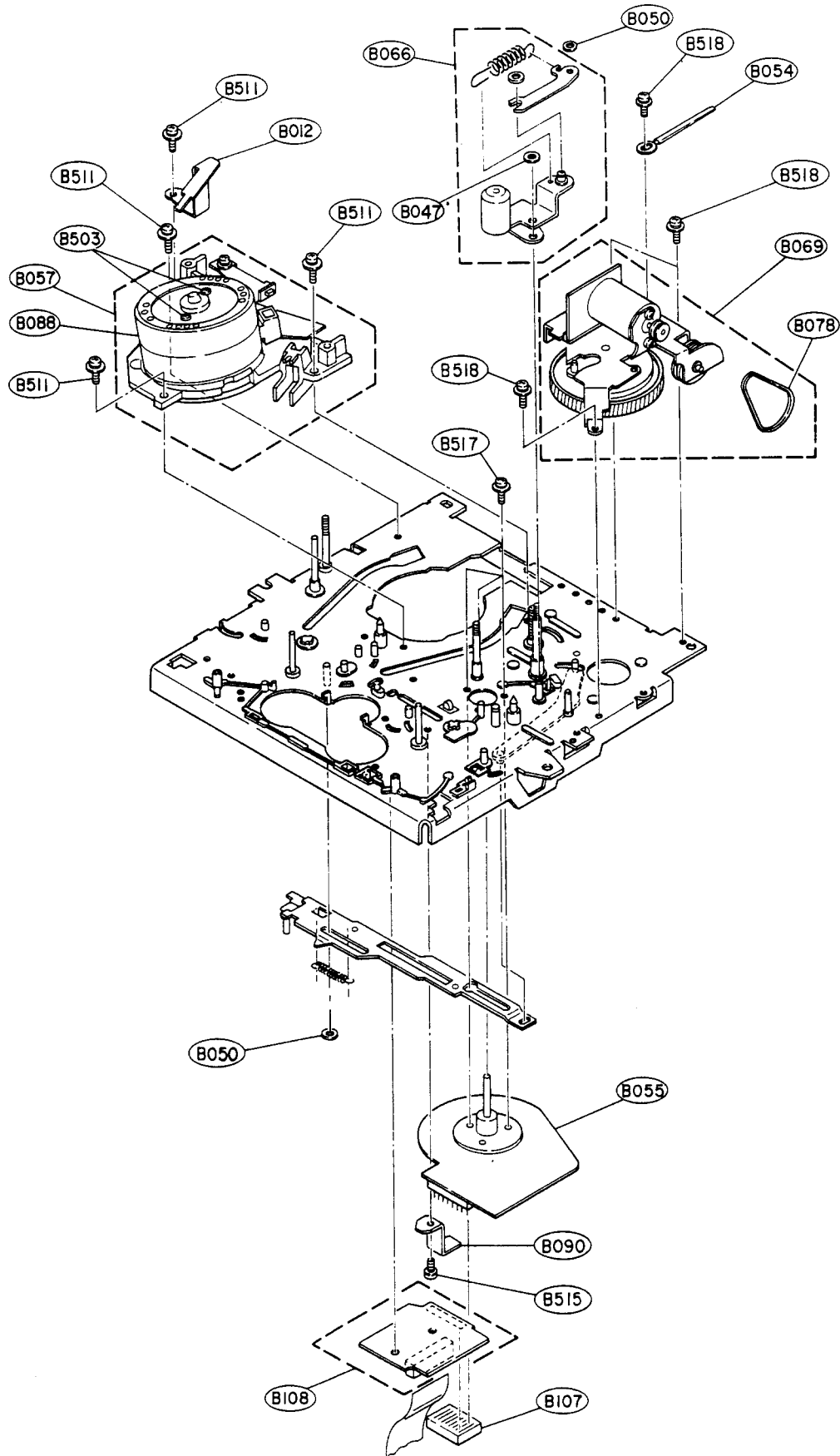
5-3. MECHANISM (I) SECTION



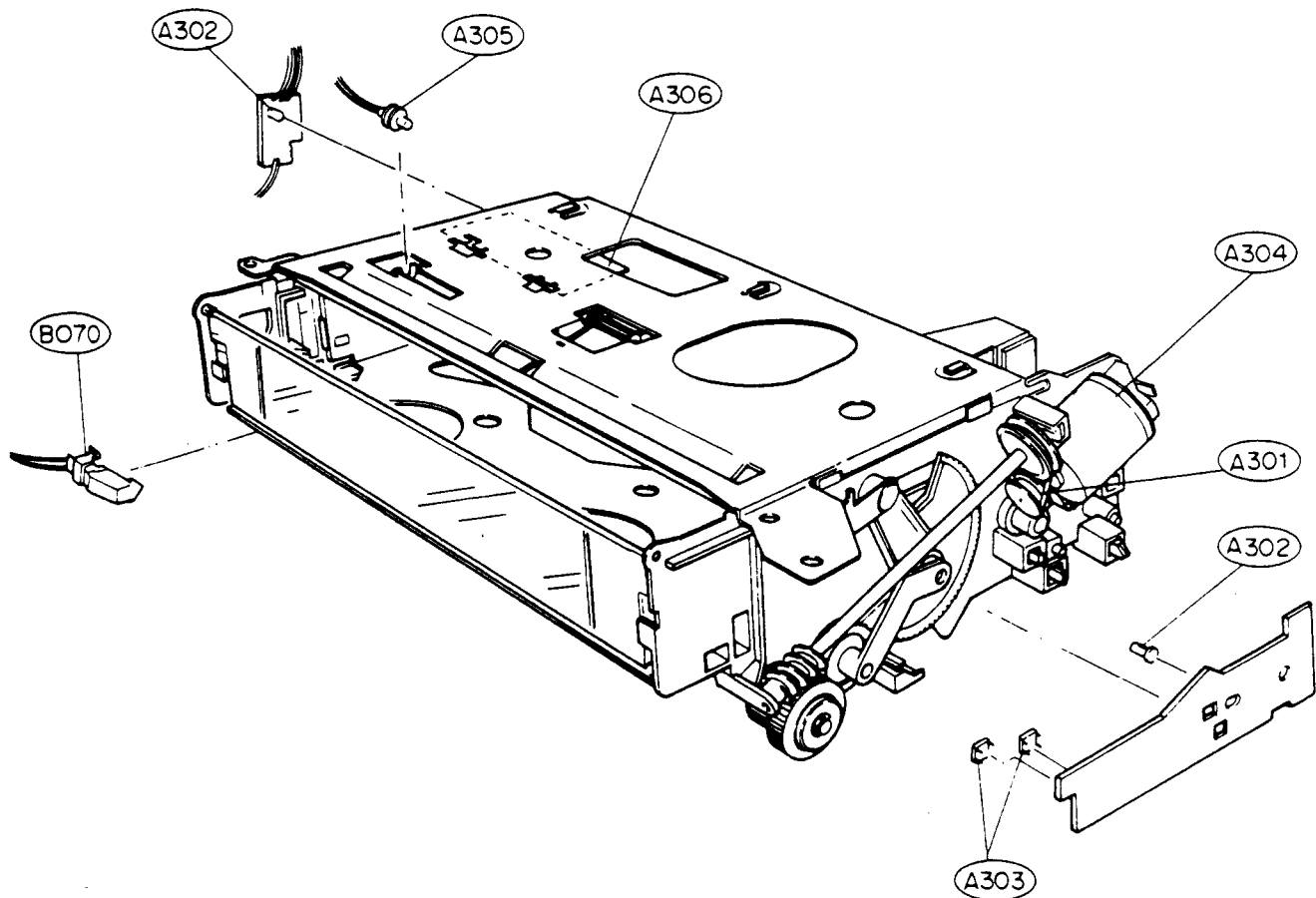
5-4. MECHANISM (II) SECTION



5-5. MECHANISM (III) SECTION




5-6. CASSETTE HOUSING SECTION



SECTION 6

REPLACEMENT PARTS LIST

SYSCON/SERVO PWB ASSY	6-2
VIDEO PWB ASSY	6-7
PRE AMP PWB ASSY	6-17
FLYING ERASE PWB ASSY	6-18
AUDIO PWB ASSY	6-20
H.P/VIDEO SW PWB ASSY	6-22
TIMER/FUNCTION PWB ASSY	6-24
SUB FUNCTION PWB ASSY	6-25
TUNER/IF PWB ASSY	6-26
DECODER PWB ASSY	6-29
DIGITAL PWB ASSY	6-31
EVER 5V TR MK-2 ASSY	6-37
JACK TERMINAL PWB ASSY	6-38
POWER REGULATOR PWB ASSY	6-38
OTHER SERVICE PARTS	6-39
CASSETTE HOUSING ASSY	6-42

REPLACEMENT PARTS WHICH HAVE SPECIAL SAFETY CHARACTERISTICS ARE IDENTIFIED BY  SHADING ON THE SCHEMATICS. REPLACE THESE CRITICAL COMPONENTS WITH RECOMMENDED REPLACEMENT PARTS. DON'T DEGRADE THE SAFETY OF THE SET THROUGH IMPROPER SERVING.

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS ***			
IC1101	37151536	MOS UPD75108CW-297	1
IC1102	37151334	IC BA6246	1
IC1103	371E1514	IC PST529D-2-T VOLTAGE DE	1
IC1104	37151350	IC M50782SP(I/O EXPANDER)	1
IC1601	37151482	MOS BU2726S	1
IC1602	37901081	IC M5218 L(SIP)	1
IC1603	37101349	IC BA6993N	1
IC1604	37101117	IC UPC324C	1
IC1605	37151371	MOS BU4066BL	1
IC1607	37151371	MOS BU4066BL	1
IC1608	37151408	MOS BU4011BL	1
IC1609	37101159	LA7016 ANALOG SW	1
IC1610	37101369	IC UPC78N05H	1
IC1612	37151481	MOS BU3765AS VISS VASS	1
IC1614	37151499	MOS M50927-203SP (ATR)	1
IC1871	37151477	IC SDA5642 (VPS DECODER)	1

*** TRANSISTORS ***

Q1101	355D2717	TR,BA1L4M	1
Q1102	35543418	TR,2SC1741A(R)	1
Q1103	35562518	TR,2SD1227M R	1
Q1105	355D2715	TR,BA1A4M(C,10K)AT	1
Q1106	355D2715	TR,BA1A4M(C,10K)AT	1
Q1571	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q1572	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q1573	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q1574	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q1601	355D2717	TR,BA1L4M	1
Q1602	355D2717	TR,BA1L4M	1
Q1603	355D2717	TR,BA1L4M	1
Q1604	355D2717	TR,BA1L4M	1
Q1605	355D2717	TR,BA1L4M	1
Q1606	355D2717	TR,BA1L4M	1
Q1607	355D2717	TR,BA1L4M	1
Q1608	355D2717	TR,BA1L4M	1
Q1609	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q1610	355D2717	TR,BA1L4M	1
Q1611	355K1131	TR,2SA1175 (E,F,H,J)	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q1612	355K2111	TR,BN1L4M(A,47K)AT	1
Q1613	355D2717	TR,BA1L4M	1
Q1614	355K2111	TR,BN1L4M(A,47K)AT	1
Q1615	355K2109	TR,BN1A4M (A,10K)AT	1
Q1616	355K1131	TR,2SA1175 (E,F,H,J)	1
Q1617	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q1618	355D2717	TR,BA1L4M	1
Q1619	355D2717	TR,BA1L4M	1
Q1620	355D2717	TR,BA1L4M	1
Q1621	355D2710	DTC124ES,AT	1
Q1771	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q1772	355D2711	DTC144ES,AT	1
Q1774	355K2111	TR,BN1L4M(A,47K)AT	1
Q1775	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q1776	355D2717	TR,BA1L4M	1
Q1777	355D2711	DTC144ES,AT	1
Q1901	355K1131	TR,2SA1175 (E,F,H,J)	1
Q1902	355K1131	TR,2SA1175 (E,F,H,J)	1

*** DIODES ***

D1101	360KA025	DIODE 1SS133	1
D1102	360KA025	DIODE 1SS133	1
D1103	369KB107	DIODE 11E2TA1	1
D1104	369KB107	DIODE 11E2TA1	1
D1601	360KA025	DIODE 1SS133	1
D1602	360KA025	DIODE 1SS133	1
D1603	360KA025	DIODE 1SS133	1
D1604	360KA025	DIODE 1SS133	1
D1605	360KA025	DIODE 1SS133	1
D1606	360KA025	DIODE 1SS133	1
D1607	360KA025	DIODE 1SS133	1
D1608	360KA025	DIODE 1SS133	1
D1609	360KA025	DIODE 1SS133	1
D1610	360KA025	DIODE 1SS133	1
D1611	360KA025	DIODE 1SS133	1
D1612	360KA025	DIODE 1SS133	1
D1613	360KA025	DIODE 1SS133	1
D1614	360KA025	DIODE 1SS133	1
D1615	360KA025	DIODE 1SS133	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
D1616	360KA025	DIODE 1SS133	1
D1617	360KA025	DIODE 1SS133	1
D1618	360KA025	DIODE 1SS133	1
D1619	360KA009	DIODE 1S2473 AT26	1
D1620	360KA025	DIODE 1SS133	1
D1621	360KA009	DIODE 1S2473 AT26	1
D1622	360KA009	DIODE 1S2473 AT26	1
D1623	360KA025	DIODE 1SS133	1
D1625	360KA009	DIODE 1S2473 AT26	1
D1626	360KA009	DIODE 1S2473 AT26	1
D1627	360KA025	DIODE 1SS133	1
D1628	360KA009	DIODE 1S2473 AT26	1
D1629	360KA009	DIODE 1S2473 AT26	1
D1630	360KA025	DIODE 1SS133	1
D1631	360KA025	DIODE 1SS133	1
D1632	360KA025	DIODE 1SS133	1
D1633	360KA025	DIODE 1SS133	1
D1634	360KA025	DIODE 1SS133	1
D1639	360KA025	DIODE 1SS133	1
D1639	360KC972	DIODE MA165 AT26	1
D1640	360KA025	DIODE 1SS133	1
D1641	360KA025	DIODE 1SS133	1
D1771	360KA025	DIODE 1SS133	1
D1772	360KA025	DIODE 1SS133	1
D1773	360KA025	DIODE 1SS133	1
ZD1101	369KE177	ZENER DIODE RD8.2EB3,AT26	1

*** VARIABLE RESISTORS ***

VR1601	41951154	R,VARIABLE 100K,B	1
VR1602	41951154	R,VARIABLE 100K,B	1
VR1603	41951157	R,VARIABLE 330K,B	1
VR1604	41951157	R,VARIABLE 330K,B	1

*** COILS & FILTERS ***

FL1901	61828034	4.43MHZ CHROMA DL EQ(RF)	1
L1571	610G1529	FILTER COIL 100UH AT (S)	1
L1572	610G1521	FILTER COIL 22UH AT (S)	1
L1573	610G1520	FILTER COIL 18UH AT(S)	1
L1901	610G1529	FILTER COIL 100UH AT (S)	1
X1601	61919078	CERALOCK 4MHZ	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***			
BZ1771	63099017	PIEZO BUZZER KBS-20B-6P	1
RM1101	39906128	RBLOCK100K*5 1.8MM 1/16W	1
RM1102	39901055	R BLOCK1.0K*6 1.8MM 1/16W	1
RM1103	39906131	RBLOCK100K*8 1.8MM 1/16W	1
X1101	39080023	4.19MHZ RESONATOR	1
X1602	39080031	CERAMIC RESONATOR 3.34MHZ	1

*** RESISTORS ***

R1101	409HB661	R,CARBON 330H 5% 1/4W	1
R1102	40912161	R,CARBON 330H 5% 1/2W	1
R1103	40351109	R,METAL 2.2H 5% 1W	1
R1104	401KE721	R,CARBON 100K 5% 1/6W	1
R1106	409HB714	R,CARBON 51K 5% 1/4W	1
R1107	401KE714	R,CARBON 51K 5% 1/6W	1
R1108	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1109	401KE721	R,CARBON 100K 5% 1/6W	1
R1111	401KE721	R,CARBON 100K 5% 1/6W	1
R1112	401KE721	R,CARBON 100K 5% 1/6W	1
R1115	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1116	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1117	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1118	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1119	401KE721	R,CARBON 100K 5% 1/6W	1
R1120	401KE721	R,CARBON 100K 5% 1/6W	1
R1121	401KE697	R,CARBON 10K 5% 1/6W	1
R1122	401KE697	R,CARBON 10K 5% 1/6W	1
R1123	401KE697	R,CARBON 10K 5% 1/6W	1
R1124	401KE697	R,CARBON 10K 5% 1/6W	1
R1128	401KE697	R,CARBON 10K 5% 1/6W	1
R1132	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1133	401KE657	R,CARBON 220H 5% 1/6W	1
R1134	401KE657	R,CARBON 220H 5% 1/6W	1
R1135	401KE657	R,CARBON 220H 5% 1/6W	1
R1136	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1137	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1138	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1139	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1140	401KE685	R,CARBON 3.3K 5% 1/6W	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1141	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1142	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1143	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1144	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1145	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1146	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1147	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1148	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1149	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1150	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1151	409HB697	R,CARBON 10K 5% 1/4W	1
R1152	409HB697	R,CARBON 10K 5% 1/4W	1
R1161	401KE721	R,CARBON 100K 5% 1/6W	1
R1162	401KE721	R,CARBON 100K 5% 1/6W	1
R1163	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1165	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1169	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1571	401KE707	R,CARBON 27K 5% 1/6W	1
R1572	401KE695	R,CARBON 8.2K 5% 1/6W	1
R1573	401KE677	R,CARBON 1.5K 5% 1/6W	1
R1574	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1575	401KE675	R,CARBON 1.2K 5% 1/6W	1
R1576	401KE739	R,CARBON 560K 5% 1/6W	1
R1577	401KE681	R,CARBON 2.2K 5% 1/6W	1
R1578	401KE695	R,CARBON 8.2K 5% 1/6W	1
R1579	401KE681	R,CARBON 2.2K 5% 1/6W	1
R1580	401KE667	R,CARBON 560H 5% 1/6W	1
R1581	401KE649	R,CARBON 100H 5% 1/6W	1
R1582	401KE713	R,CARBON 47K 5% 1/6W	1
R1583	401KE693	R,CARBON 6.8K 5% 1/6W	1
R1584	401KE697	R,CARBON 10K 5% 1/6W	1
R1585	401KE641	R,CARBON 47H 5% 1/6W	1
R1601	401KE729	R,CARBON 220K 5% 1/6W	1
R1602	401KE717	R,CARBON 68K 5% 1/6W	1
R1603	401KE693	R,CARBON 6.8K 5% 1/6W	1
R1604	409HB761	R,CARBON 4.7M 5% 1/4W	1
R1605	401KE728	R,CARBON 200K 5% 1/6W	1
R1606	401KE732	R,CARBON 300K 5% 1/6W	1
R1607	401KE735	R,CARBON 390K 5% 1/6W	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1608	401KE693	R,CARBON 6.8K 5% 1/6W	1
R1609	409HB761	R,CARBON 4.7M 5% 1/4W	1
R1610	401KE732	R,CARBON 300K 5% 1/6W	1
R1611	401KE717	R,CARBON 68K 5% 1/6W	1
R1612	401KE719	R,CARBON 82K 5% 1/6W	1
R1613	401KE705	R,CARBON 22K 5% 1/6W	1
R1614	401KE693	R,CARBON 6.8K 5% 1/6W	1
R1615	401KE670	R,CARBON 750H 5% 1/6W	1
R1616	401KE671	R,CARBON 820H 5% 1/6W	1
R1617	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1618	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1619	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1620	401KE693	R,CARBON 6.8K 5% 1/6W	1
R1621	401KE745	R,CARBON 1.0M 5% 1/6W	1
R1623	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1624	401KE677	R,CARBON 1.5K 5% 1/6W	1
R1625	401KE687	R,CARBON 3.9K 5% 1/6W	1
R1626	401KE703	R,CARBON 18K 5% 1/6W	1
R1627	401KE715	R,CARBON 56K 5% 1/6W	1
R1628	401KE721	R,CARBON 100K 5% 1/6W	1
R1629	409HB751	R,CARBON 1.8M 5% 1/4W	1
R1630	401KE699	R,CARBON 12K 5% 1/6W	1
R1631	401KE699	R,CARBON 12K 5% 1/6W	1
R1632	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1633	401KE721	R,CARBON 100K 5% 1/6W	1
R1634	401KE661	R,CARBON 330H 5% 1/6W	1
R1635	401KE745	R,CARBON 1.0M 5% 1/6W	1
R1636	401KE715	R,CARBON 56K 5% 1/6W	1
R1637	401KE703	R,CARBON 18K 5% 1/6W	1
R1638	401KE677	R,CARBON 1.5K 5% 1/6W	1
R1639	401KE729	R,CARBON 220K 5% 1/6W	1
R1640	401KE697	R,CARBON 10K 5% 1/6W	1
R1641	401KE697	R,CARBON 10K 5% 1/6W	1
R1642	401KE745	R,CARBON 1.0M 5% 1/6W	1
R1643	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1644	401KE699	R,CARBON 12K 5% 1/6W	1
R1647	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1648	401KE661	R,CARBON 330H 5% 1/6W	1
R1649	401KE721	R,CARBON 100K 5% 1/6W	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1651	401KE693	R,CARBON 6.8K 5% 1/6W	1
R1652	409HB691	R,CARBON 5.6K 5% 1/4W	1
R1653	401KE725	R,CARBON 150K 5% 1/6W	1
R1654	409HB714	R,CARBON 51K 5% 1/4W	1
R1655	401KE725	R,CARBON 150K 5% 1/6W	1
R1656	409HB714	R,CARBON 51K 5% 1/4W	1
R1657	401KE697	R,CARBON 10K 5% 1/6W	1
R1658	401KE721	R,CARBON 100K 5% 1/6W	1
R1659	401KE691	R,CARBON 5.6K 5% 1/6W	1
R1660	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1661	401KE729	R,CARBON 220K 5% 1/6W	1
R1662	401KE731	R,CARBON 270K 5% 1/6W	1
R1663	401KE737	R,CARBON 470K 5% 1/6W	1
R1664	401KE713	R,CARBON 47K 5% 1/6W	1
R1665	401KE713	R,CARBON 47K 5% 1/6W	1
R1666	401KE721	R,CARBON 100K 5% 1/6W	1
R1667	401KE709	R,CARBON 33K 5% 1/6W	1
R1668	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1669	401KE697	R,CARBON 10K 5% 1/6W	1
R1670	401KE697	R,CARBON 10K 5% 1/6W	1
R1671	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1672	401KE645	R,CARBON 68H 5% 1/6W	1
R1673	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1674	401KE649	R,CARBON 100H 5% 1/6W	1
R1675	401KE705	R,CARBON 22K 5% 1/6W	1
R1676	409HB649	R,CARBON 100H 5% 1/4W	1
R1677	401KE709	R,CARBON 33K 5% 1/6W	1
R1678	401KE695	R,CARBON 8.2K 5% 1/6W	1
R1679	401KE679	R,CARBON 1.8K 5% 1/6W	1
R1680	401KE657	R,CARBON 220H 5% 1/6W	1
R1681	401KE715	R,CARBON 56K 5% 1/6W	1
R1682	401KE695	R,CARBON 8.2K 5% 1/6W	1
R1683	401KE707	R,CARBON 27K 5% 1/6W	1
R1684	401KE707	R,CARBON 27K 5% 1/6W	1
R1685	401KE697	R,CARBON 10K 5% 1/6W	1
R1686	401KE697	R,CARBON 10K 5% 1/6W	1
R1687	401KE697	R,CARBON 10K 5% 1/6W	1
R1688	401KE695	R,CARBON 8.2K 5% 1/6W	1
R1689	401KE713	R,CARBON 47K 5% 1/6W	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1690	401KE739	R,CARBON 560K 5% 1/6W	1
R1691	401KE695	R,CARBON 8.2K 5% 1/6W	1
R1692	401KE679	R,CARBON 1.8K 5% 1/6W	1
R1693	401KE711	R,CARBON 39K 5% 1/6W	1
R1694	401KE737	R,CARBON 470K 5% 1/6W	1
R1695	401KE745	R,CARBON 1.0M 5% 1/6W	1
R1696	401KE739	R,CARBON 560K 5% 1/6W	1
R1697	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1698	401KE745	R,CARBON 1.0M 5% 1/6W	1
R1699	401KE683	R,CARBON 2.7K 5% 1/6W	1
R1700	401KE682	R,CARBON 2.4K 5% 1/6W	1
R1701	401KE679	R,CARBON 1.8K 5% 1/6W	1
R1702	401KE687	R,CARBON 3.9K 5% 1/6W	1
R1703	401KE697	R,CARBON 10K 5% 1/6W	1
R1704	409HB689	R,CARBON 4.7K 5% 1/4W	1
R1705	409HB705	R,CARBON 22K 5% 1/4W	1
R1708	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1709	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1712	401KE701	R,CARBON 15K 5% 1/6W	1
R1713	401KE697	R,CARBON 10K 5% 1/6W	1
R1714	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1715	401KE697	R,CARBON 10K 5% 1/6W	1
R1716	401KE697	R,CARBON 10K 5% 1/6W	1
R1717	401KE721	R,CARBON 100K 5% 1/6W	1
R1772	401KE721	R,CARBON 100K 5% 1/6W	1
R1773	401KE697	R,CARBON 10K 5% 1/6W	1
R1774	409HB649	R,CARBON 100H 5% 1/4W	1
R1775	401KE697	R,CARBON 10K 5% 1/6W	1
R1776	409HB713	R,CARBON 47K 5% 1/4W	1
R1871	401KE649	R,CARBON 100H 5% 1/6W	1
R1872	401KE743	R,CARBON 820K 5% 1/6W	1
R1873	401KE691	R,CARBON 5.6K 5% 1/6W	1
R1874	401KE721	R,CARBON 100K 5% 1/6W	1
R1875	401KE743	R,CARBON 820K 5% 1/6W	1
R1876	401KE745	R,CARBON 1.0M 5% 1/6W	1
R1877	401KE680	R,CARBON 2.0K 5% 1/6W	1
R1879	401KE697	R,CARBON 10K 5% 1/6W	1
R1880	401KE697	R,CARBON 10K 5% 1/6W	1
R1881	401KE691	R,CARBON 5.6K 5% 1/6W	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1901	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1902	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1903	401KE673	R,CARBON 1.0K 5% 1/6W	1
R1904	401KE673	R,CARBON 1.0K 5% 1/6W	1

*** CAPACITORS ***

C1101	421CB461	C,CERAMIC 16V 0.01UF	1
C1102	430A8113	C,ELEC 16V 100UF	1
C1103	421CB461	C,CERAMIC 16V 0.01UF	1
C1104	421CB461	C,CERAMIC 16V 0.01UF	1
C1105	421CB461	C,CERAMIC 16V 0.01UF	1
C1106	429C0333	C,CERAMIC 25V 0.047UF	1
C1108	430A8104	C,ELEC 6.3V 100UF	1
C1109	421CB461	C,CERAMIC 16V 0.01UF	1
C1110	421CB863	C,CERAMIC 25V 0.022UF	1
C1571	430A8103	C,ELEC 6.3V 47UF	1
C1572	421CB461	C,CERAMIC 16V 0.01UF	1
C1573	421CB025	C,CERAMIC 50V 33 PF	1
C1574	421CB040	C,CERAMIC 50V 180PF	1
C1575	421CB033	C,CERAMIC 50V 68 PF	1
C1576	421CB461	C,CERAMIC 16V 0.01UF	1
C1577	429G6913	C,FILM 50V 0.1UF	1
C1601	433A4159	C,ELEC 50V 0.47UF-5BSRAAT	1
C1602	429G6912	C,FILM 50V 0.082UF	1
C1603	430A8128	C,ELEC 50V 1UF	1
C1604	430A8109	C,ELEC 16V 10UF	1
C1605	430A8101	C,ELEC 6.3V 22UF	1
C1606	430A8103	C,ELEC 6.3V 47UF	1
C1607	421CB029	C,CERAMIC 50V 47 PF	1
C1608	43983306	C,ELEC 6.3V 470UF	1
C1609	430A8104	C,ELEC 6.3V 100UF	1
C1610	421CB037	C,CERAMIC 50V 100PF	1
C1611	430A8124	C,ELEC 50V 0.1UF	1
C1612	430A8109	C,ELEC 16V 10UF	1
C1613	430A8128	C,ELEC 50V 1UF	1
C1614	430A8109	C,ELEC 16V 10UF	1
C1615	430A8114	C,ELEC 25V 4.7UF	1
C1616	430A8103	C,ELEC 6.3V 47UF	1
C1617	430A8144	C,ELEC 6.3V 220UF,AT	1
C1618	430A8105	C,ELEC 10V 22UF	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1619	430A8109	C,ELEC 16V 10UF	1
C1620	429G6915	C,METAL FILM 50V 0.15UF	1
C1621	429G6912	C,FILM 50V 0.082UF	1
C1622	429G8269	C,METAL FILM 50V 0.033UF	1
C1623	429G6913	C,FILM 50V 0.1UF	1
C1624	429G8251	C,METAL FILM 50V 1000PF	1
C1625	429G8263	C,METAL FILM 50V 0.01UF	1
C1626	429G6919	C,METAL FILM 50V 0.33UF	1
C1627	433A4159	C,ELEC 50V 0.47UF-5BSRAAT	1
C1628	421CB037	C,CERAMIC 50V 100PF	1
C1629	421CB037	C,CERAMIC 50V 100PF	1
C1630	421CB863	C,CERAMIC 25V 0.022UF	1
C1631	421CB041	C,CERAMIC 50V 220PF	1
C1632	429G8267	C,METAL FILM 50V 0.022UF	1
C1633	429G8267	C,METAL FILM 50V 0.022UF	1
C1634	430A8103	C,ELEC 6.3V 47UF	1
C1635	421CB863	C,CERAMIC 25V 0.022UF	1
C1636	421CB037	C,CERAMIC 50V 100PF	1
C1637	421CB025	C,CERAMIC 50V 33 PF	1
C1638	421CB025	C,CERAMIC 50V 33 PF	1
C1639	430A8128	C,ELEC 50V 1UF	1
C1640	429G6915	C,METAL FILM 50V 0.15UF	1
C1641	421CB453	C,CERAMIC 16V 2200PF	1
C1642	421CB049	C,CERAMIC 50V 1000PF	1
C1645	430A8109	C,ELEC 16V 10UF	1
C1646	430A8103	C,ELEC 6.3V 47UF	1
C1649	421CB863	C,CERAMIC 25V 0.022UF	1
C1655	421CB863	C,CERAMIC 25V 0.022UF	1
C1659	421CB461	C,CERAMIC 16V 0.01UF	1
C1660	430A8125	C,ELEC 50V 0.22UF	1
C1661	421CB019	C,CERAMIC 50V 18 PF	1
C1771	430A8109	C,ELEC 16V 10UF	1
C1777	430A8110	C,ELEC 16V 22UF	1
C1778	430A8112	C,ELEC 16V 47UF	1
C1779	430A8112	C,ELEC 16V 47UF	1
C1780	421A0933	C,CERAMIC 50V 0.047UF	1
C1781	421CB461	C,CERAMIC 16V 0.01UF	1
C1871	430A8104	C,ELEC 6.3V 100UF	1
C1872	421J9001	C,CERAMIC 50V 0.1UF	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1873	423A3051	C,CERAMIC 50V 150PF	1
C1874	42110931	C,CERAMIC 50V 0.033UF	1
C1875	421J9001	C,CERAMIC 50V 0.1UF	1
C1876	430A8316	C,ELEC 16V 4.7UF	1
C1901	430A8112	C,ELEC 16V 47UF	1
C1902	421CB863	C,CERAMIC 25V 0.022UF	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** ICS ***

IC1	37151538	UPD74HC4538C (MONO-MULTI)	1
IC1201	37101409	IC AN3232FB VK-3 S-VHS Y	1
IC1202	37101364	IC VC2031DP	1
IC1203	37101410	IC AN3398 S-VHS AUTO SW	1
IC1204	37101159	LA7016 ANALOG SW	1
IC1205	37101159	LA7016 ANALOG SW	1
IC1206	37101159	LA7016 ANALOG SW	1
IC1401	37101283	AN6367NK(P/MS CHROMA MOD)	1
IC1402	37151240	IC MN6163A (CHROMA SYNC)	1
IC1403	37101249	BA7025L (SECAM DET)	1
IC1404	37101439	MSM6967-RS (CCD PAL 3FSC)	1
IC1405	37151538	UPD74HC4538C (MONO-MULTI)	1
IC1406	37101159	LA7016 ANALOG SW	1
IC1407	37101159	LA7016 ANALOG SW	1
IC1408	37101159	LA7016 ANALOG SW	1
IC1409	37101159	LA7016 ANALOG SW	1
IC1410	37101159	LA7016 ANALOG SW	1
IC1411	37051036	MOS UPD4066BC	1
IC1412	37101159	LA7016 ANALOG SW	1
IC1413	37101159	LA7016 ANALOG SW	1
IC1415	37101159	LA7016 ANALOG SW	1
IC1416	37101449	IC M51386L (COMB PROCESS)	1
IC1417	37101159	LA7016 ANALOG SW	1
IC2	37051036	MOS UPD4066BC	1

*** TRANSISTORS ***

Q1	355D2710	DTC124ES,AT	1
Q1203	356D0501	DTC124EK(0°)	1
Q1204	355K2112	UN4121(2.2K) DIGITRA	1
Q1205	356D0501	DTC124EK(0°)	1
Q1206	356D0501	DTC124EK(0°)	1
Q1208	356D0501	DTC124EK(0°)	1
Q1209	355K2112	UN4121(2.2K) DIGITRA	1
Q1210	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q1211	356D0501	DTC124EK(0°)	1
Q1212	356D0501	DTC124EK(0°)	1
Q1213	356D0501	DTC124EK(0°)	1
Q1215	356D0618	2SC2412K-R(0°)	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q1216	356K0618	2SA1037K-R,AT	1
Q1217	356D0501	DTC124EK(0°)	1
Q1218	356D0501	DTC124EK(0°)	1
Q1219	356D0500	DTC144EK(0°)	1
Q1220	356D0500	DTC144EK(0°)	1
Q1221	356K0502	DTA114EK(0°)	1
Q1222	356K0501	DTA124EK(0°)	1
Q1223	356D0618	2SC2412K-R(0°)	1
Q1224	356D0618	2SC2412K-R(0°)	1
Q1226	356K0501	DTA124EK(0°)	1
Q1227	356D0500	DTC144EK(0°)	1
Q1228	356K0501	DTA124EK(0°)	1
Q1229	356D0501	DTC124EK(0°)	1
Q1230	356K0618	2SA1037K-R,AT	1
Q1231	356D0618	2SC2412K-R(0°)	1
Q1232	356D0618	2SC2412K-R(0°)	1
Q1233	356D0618	2SC2412K-R(0°)	1
Q1234	356D0618	2SC2412K-R(0°)	1
Q1235	356D0618	2SC2412K-R(0°)	1
Q1236	356D0618	2SC2412K-R(0°)	1
Q1237	356D0618	2SC2412K-R(0°)	1
Q1238	356D0618	2SC2412K-R(0°)	1
Q1239	356D0618	2SC2412K-R(0°)	1
Q1240	356D0618	2SC2412K-R(0°)	1
Q1241	356D0618	2SC2412K-R(0°)	1
Q1242	356D0501	DTC124EK(0°)	1
Q1243	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q1244	356D0501	DTC124EK(0°)	1
Q1245	356D0618	2SC2412K-R(0°)	1
Q1249	356D0618	2SC2412K-R(0°)	1
Q1250	356K0618	2SA1037K-R,AT	1
Q1251	356D0618	2SC2412K-R(0°)	1
Q1252	356D0618	2SC2412K-R(0°)	1
Q1253	356K0618	2SA1037K-R,AT	1
Q1254	356D0501	DTC124EK(0°)	1
Q1255	356D0501	DTC124EK(0°)	1
Q1256	356D0500	DTC144EK(0°)	1
Q1257	356D0500	DTC144EK(0°)	1
Q1258	355D2710	DTC124ES,AT	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q1265	355D2710	DTC124ES,AT	1
Q1401	356K0618	2SA1037K-R,AT	1
Q1402	356D0618	2SC2412K-R(0°)	1
Q1403	356D0618	2SC2412K-R(0°)	1
Q1406	356K0618	2SA1037K-R,AT	1
Q1407	356D0618	2SC2412K-R(0°)	1
Q1408	356D0618	2SC2412K-R(0°)	1
Q1410	356K0501	DTA124EK(0°)	1
Q1412	356D0501	DTC124EK(0°)	1
Q1413	356D0501	DTC124EK(0°)	1
Q1414	356D0501	DTC124EK(0°)	1
Q1415	356K0618	2SA1037K-R,AT	1
Q1416	356K0501	DTA124EK(0°)	1
Q1417	356D0618	2SC2412K-R(0°)	1
Q1418	356D0618	2SC2412K-R(0°)	1
Q1419	356D0618	2SC2412K-R(0°)	1
Q1420	356K0618	2SA1037K-R,AT	1
Q1421	356K0618	2SA1037K-R,AT	1
Q1422	356D0618	2SC2412K-R(0°)	1
Q1423	356K0618	2SA1037K-R,AT	1
Q1424	356K0501	DTA124EK(0°)	1
Q1425	356D0618	2SC2412K-R(0°)	1
Q1426	356D0618	2SC2412K-R(0°)	1
Q1427	356D0618	2SC2412K-R(0°)	1
Q1428	356D0618	2SC2412K-R(0°)	1
Q1430	356D0501	DTC124EK(0°)	1
Q1431	356D0618	2SC2412K-R(0°)	1
Q1432	356D0618	2SC2412K-R(0°)	1
Q1434	356D0618	2SC2412K-R(0°)	1
Q1435	356D0618	2SC2412K-R(0°)	1
Q1438	356D0618	2SC2412K-R(0°)	1
Q1439	356D0500	DTC144EK(0°)	1
Q1440	356D0618	2SC2412K-R(0°)	1
Q1441	356D0618	2SC2412K-R(0°)	1
Q1442	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q1443	355D2710	DTC124ES,AT	1
Q1444	355K2106	TR,DTA124ES,AT	1
Q1445	355D2710	DTC124ES,AT	1
Q1446	355D2710	DTC124ES,AT	1
Q2	355D2710	DTC124ES,AT	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q3	355D2710	DTC124ES,AT	1
Q4	355D2710	DTC124ES,AT	1
TR1	355K1131	TR,2SA1175 (E,F,H,J)	1
TR2	355D1931	TR,2SC2785 (E,F,H,J)AT	1

*** DIODES ***

D1	360KA025	DIODE 1SS133	1
D1201	360K3909	CHIP DIODE 1S2838-A6-T1	1
D1202	360K3909	CHIP DIODE 1S2838-A6-T1	1
D1203	360K3908	CHIP DIODE 1S2836-A4-T1	1
D1205	360K3909	CHIP DIODE 1S2838-A6-T1	1
D1206	360KA025	DIODE 1SS133	1
D1207	360KA025	DIODE 1SS133	1
D1401	360K3909	CHIP DIODE 1S2838-A6-T1	1
D1402	360K3909	CHIP DIODE 1S2838-A6-T1	1
D1403	360K3909	CHIP DIODE 1S2838-A6-T1	1
D1404	360K3909	CHIP DIODE 1S2838-A6-T1	1
D1405	360KA025	DIODE 1SS133	1
D1406	360KA025	DIODE 1SS133	1
D2	360KA025	DIODE 1SS133	1
D3	360KA025	DIODE 1SS133	1
D4	360KA025	DIODE 1SS133	1
D5	360KA025	DIODE 1SS133	1
D6	360KA025	DIODE 1SS133	1
ZD1401	369KE179	ZENER DIODE RD9.1EB2,AT26	1

*** VARIABLE RESISTORS ***

VR1	41951257	R,VARIABLE 47KB	1
VR1201	41951150	R,VARIABLE 22K,B	1
VR1202	41951148	R,VARIABLE 10K,B	1
VR1203	41951146	R,VARIABLE 4.7K,B	1
VR1204	41951142	R,VARIABLE 1.0K,B	1
VR1205	41951150	R,VARIABLE 22K,B	1
VR1206	41951148	R,VARIABLE 10K,B	1
VR1207	41951150	R,VARIABLE 22K,B	1
VR1208	41951150	R,VARIABLE 22K,B	1
VR1209	41951150	R,VARIABLE 22K,B	1
VR1210	41951150	R,VARIABLE 22K,B	1
VR1211	41951148	R,VARIABLE 10K,B	1
VR1212	41951150	R,VARIABLE 22K,B	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
VR1213	41951140	R,VARIABLE 470H,B	1
VR1215	41951144	R,VARIABLE 2.2K,B	1
VR1217	41951152	R,VARIABLE 47K,B	1
VR1219	41951152	R,VARIABLE 47K,B	1
VR1401	41951152	R,VARIABLE 47K,B	1
VR1402	41951144	R,VARIABLE 2.2K,B	1
VR1403	41951146	R,VARIABLE 4.7K,B	1
VR1404	41951142	R,VARIABLE 1.0K,B	1
VR1406	41951152	R,VARIABLE 47K,B	1
VR1407	41951150	R,VARIABLE 22K,B	1
VR1408	41951148	R,VARIABLE 10K,B	1
VR1409	41951148	R,VARIABLE 10K,B	1
VR1412	41951146	R,VARIABLE 4.7K,B	1
VR1413	41951144	R,VARIABLE 2.2K,B	1
VR1414	41951146	R,VARIABLE 4.7K,B	1

*** COILS & FILTERS ***

CF1401	61137009	CERAMIC FILTER 4.16MHZ	1
DL1401	61551092	2H DL (FOR SVHS-COMB)	1
DL1402	61551096	2H COMB FILTER (BEND)	1
FL1201	61827111	4.0MHZ L.P.F. (VHS-PAL)	1
FL1202	61827102	5.4MHZ LPF (VK-3-S TOKO)	1
FL1401	61827113	4.43MHZ B.P.F. (SVHS-PAL)	1
FL1402	61827114	5.06MHZ B.P.F. (SVHS-PAL)	1
FL1403	61827115	1.4MHZ L.P.F. (SVHS-PAL)	1
FL1404	61827116	120NS DL EQ (CCD L.P.F.)	1
FL1405	61828035	COMB Y EQ (PAL)	1
FL1406	61828036	COMB C EQ (PAL)	1
FL1407	61828037	CHROMA DL EQ	1
L1201	610G1829	FILTER COIL 0405 100UH,AT	1
L1202	610G1529	FILTER COIL 100UH AT (S)	1
L1203	610G1811	FILTER COIL 0405 3.3UH,AT	1
L1205	610G1529	FILTER COIL 100UH AT (S)	1
L1207	610G1529	FILTER COIL 100UH AT (S)	1
L1208	610G1829	FILTER COIL 0405 100UH,AT	1
L1209	610G1834	FILTER COIL 0405 270UH,AT	1
L1211	610G1823	FILTER COIL 0405 33UH,AT	1
L1212	610G1829	FILTER COIL 0405 100UH,AT	1
L1213	610G1825	FILTER COIL 0405 47UH,AT	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
L1214	610G1821	FILTER COIL 0405 22UH,AT	1
L1215	610G1829	FILTER COIL 0405 100UH,AT	1
L1216	610G1830	FILTER COIL 0405 120UH,AT	1
L1217	610G1822	FILTER COIL 0405 27UH,AT	1
L1219	610G1830	FILTER COIL 0405 120UH,AT	1
L1220	610G1822	FILTER COIL 0405 27UH,AT	1
L1221	610G1830	FILTER COIL 0405 120UH,AT	1
L1223	610G1829	FILTER COIL 0405 100UH,AT	1
L1224	610G1838	FILTER COIL 0405 560UH,AT	1
L1225	610G1819	FILTER COIL 0405 15UH,AT	1
L1226	610G1818	FILTER COIL 0405 12UH,AT	1
L1227	610G1835	FILTER COIL 0405 330UH,AT	1
L1228	610G1831	FILTER COIL 0405 150UH,AT	1
L1229	610G1820	FILTER COIL 0405 18UH,AT	1
L1230	610G1828	FILTER COIL 0405 82UH,AT	1
L1401	610G1817	FILTER COIL 0405 10UH,AT	1
L1402	610G1822	FILTER COIL 0405 27UH,AT	1
L1404	610G1825	FILTER COIL 0405 47UH,AT	1
L1405	610G1835	FILTER COIL 0405 330UH,AT	1
L1406	610G1833	FILTER COIL 0405 220UH,AT	1
L1407	610G1545	FILTER COIL 2200UH	1
L1408	610G1841	FILTER COIL 405 1MH,AT	1
L1409	610G1841	FILTER COIL 405 1MH,AT	1
L1410	610G1841	FILTER COIL 405 1MH,AT	1
L1411	610G1517	FILTER COIL 10UH AT (S)	1
L1412	610G1817	FILTER COIL 0405 10UH,AT	1
L1413	610G1823	FILTER COIL 0405 33UH,AT	1
L1414	610G1819	FILTER COIL 0405 15UH,AT	1
L1417	610G1533	FILTER COIL 220UH AT(S)	1
T1401	61815196	COMB MATCHING 7P 15UH	1
T1402	61828014	LC FILTER (8KHZ TRAP)	1

*** PWB ASSYS ***

	81B26C01	CHROMA CTRL PWB ASSY	1
	81B26W01	SUB VIDEO PWB ASSY	1
	81B26Z01	SUB VIDEO 2 PWB ASSY	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***			
X1401	64004143	X'TAL 4.43MHZ (W/O-ADJ)	1
X1402	64004173	X'TAL 13.3MHZ (3FSC-PAL)	1
*** APPEARANCE PARTS ***			
	16289031	SUPPORT S	2
*** RESISTORS ***			
R1	401KE697	R,CARBON 10K 5% 1/6W	1
R1	401KE745	R,CARBON 1.0M 5% 1/6W	1
R1201	404X8697	R CHIP METAL 10K 5%1/16W	1
R1202	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1203	404X8697	R CHIP METAL 10K 5%1/16W	1
R1204	404X8737	R CHIP METAL 470K 5%1/16W	1
R1205	404X8753	R CHIP METAL 2.2M 5%1/10W	1
R1206	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1207	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1208	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1209	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1210	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R1211	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R1212	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1213	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R1214	404X8665	R CHIP METAL 470H 5%1/16W	1
R1215	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1216	404X8719	R CHIP METAL 82K 5%1/16W	1
R1217	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1218	404X8665	R CHIP METAL 470H 5%1/16W	1
R1219	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R1220	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R1221	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1222	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R1223	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1224	404X8693	R CHIP METAL 6.8K 5%1/16W	1
R1225	404X8691	R CHIP METAL 5.6K 5%1/16W	1
R1226	404X8657	R CHIP METAL 220H 5%1/16W	1
R1227	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1228	404X8697	R CHIP METAL 10K 5%1/16W	1
R1229	404X8681	R CHIP METAL 2.2K 5%1/16W	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1230	404X8717	R CHIP METAL 68K 5%1/16W	1
R1231	404X8701	R CHIP METAL 15K 5%1/16W	1
R1232	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1233	404X8669	R CHIP METAL 680H 5%1/16W	1
R1234	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R1235	404X8662	R CHIP METAL 360H 5%1/16W	1
R1236	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R1237	404X8713	R CHIP METAL 47K 5%1/16W	1
R1239	404X8669	R CHIP METAL 680H 5%1/16W	1
R1240	404X8671	R CHIP METAL 820H 5%1/16W	1
R1241	404X8671	R CHIP METAL 820H 5%1/16W	1
R1242	404X8665	R CHIP METAL 470H 5%1/16W	1
R1243	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R1244	404X8697	R CHIP METAL 10K 5%1/16W	1
R1245	404X8671	R CHIP METAL 820H 5%1/16W	1
R1246	404X8697	R CHIP METAL 10K 5%1/16W	1
R1247	404X8661	R CHIP METAL 330H 5%1/16W	1
R1248	404X8669	R CHIP METAL 680H 5%1/16W	1
R1249	404X8661	R CHIP METAL 330H 5%1/16W	1
R1250	404X8801	R CHIP METAL 000H JOUMPER	1
R1251	404X8665	R CHIP METAL 470H 5%1/16W	1
R1252	404X8665	R CHIP METAL 470H 5%1/16W	1
R1253	404X8691	R CHIP METAL 5.6K 5%1/16W	1
R1254	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R1255	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R1256	404X8669	R CHIP METAL 680H 5%1/16W	1
R1257	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1258	404X8669	R CHIP METAL 680H 5%1/16W	1
R1259	404X8661	R CHIP METAL 330H 5%1/16W	1
R1260	404X8665	R CHIP METAL 470H 5%1/16W	1
R1261	404X8665	R CHIP METAL 470H 5%1/16W	1
R1262	404X8699	R CHIP METAL 12K 5%1/16W	1
R1263	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1264	404X8665	R CHIP METAL 470H 5%1/16W	1
R1265	404X8659	R CHIP METAL 270H 5%1/16W	1
R1266	404X8703	R CHIP METAL 18K 5%1/16W	1
R1267	404X8699	R CHIP METAL 12K 5%1/16W	1
R1268	404X8707	R CHIP METAL 27K 5%1/16W	1
R1269	404X8665	R CHIP METAL 470H 5%1/16W	1
R1271	404X8673	R CHIP METAL 1.0H 5%1/16W	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1272	404X8713	R CHIP METAL 47K 5%1/16W	1
R1273	404X8713	R CHIP METAL 47K 5%1/16W	1
R1274	404X8655	R CHIP METAL 180H 5%1/16W	1
R1275	404X8703	R CHIP METAL 18K 5%1/16W	1
R1277	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1278	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1281	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1282	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1283	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1284	409HB657	R CARBON 220H 5% 1/4W	1
R1285	404X8697	R CHIP METAL 10K 5%1/16W	1
R1286	404X8649	R CHIP METAL 100H 5%1/16W	1
R1287	404X8721	R CHIP METAL 100K 5%1/16W	1
R1289	404X8663	R CHIP METAL 390H 5%1/16W	1
R1291	404X8667	R CHIP METAL 560H 5%1/16W	1
R1292	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R1293	404X8669	R CHIP METAL 680H 5%1/16W	1
R1294	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1295	404X8697	R CHIP METAL 10K 5%1/16W	1
R1296	404X8691	R CHIP METAL 5.6K 5%1/16W	1
R1297	404X8699	R CHIP METAL 12K 5%1/16W	1
R1298	404X8701	R CHIP METAL 15K 5%1/16W	1
R1299	404X8663	R CHIP METAL 390H 5%1/16W	1
R1300	404X8663	R CHIP METAL 390H 5%1/16W	1
R1301	404X8674	R CHIP METAL 1.1K 5%1/16W	1
R1302	404X8667	R CHIP METAL 560H 5%1/16W	1
R1303	404X8703	R CHIP METAL 18K 5%1/16W	1
R1304	404X8665	R CHIP METAL 470H 5%1/16W	1
R1305	404X8695	R CHIP METAL 8.2K 5%1/16W	1
R1307	404X8697	R CHIP METAL 10K 5%1/16W	1
R1309	404X8713	R CHIP METAL 47K 5%1/16W	1
R1313	404X8701	R CHIP METAL 15K 5%1/16W	1
R1314	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1315	404X8741	R CHIP METAL 680K 5%1/16W	1
R1316	404X8721	R CHIP METAL 100K 5%1/16W	1
R1317	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1318	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R1319	404X8659	R CHIP METAL 270H 5%1/16W	1
R1320	404X8713	R CHIP METAL 47K 5%1/16W	1
R1321	404X8705	R CHIP METAL 22K 5%1/16W	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1322	404X8713	R CHIP METAL 47K 5%1/16W	1
R1323	404X8705	R CHIP METAL 22K 5%1/16W	1
R1324	404X8705	R CHIP METAL 22K 5%1/16W	1
R1325	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1326	404X8659	R CHIP METAL 270H 5%1/16W	1
R1327	404X8705	R CHIP METAL 22K 5%1/16W	1
R1328	404X8697	R CHIP METAL 10K 5%1/16W	1
R1330	404X8697	R CHIP METAL 10K 5%1/16W	1
R1331	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R1332	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1333	404X8665	R CHIP METAL 470H 5%1/16W	1
R1334	401KE653	R,CARBON 150H 5% 1/6W	1
R1335	401KE660	R,CARBON 300H 5% 1/6W	1
R1340	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1342	401KE705	R,CARBON 22K 5% 1/6W	1
R1401	404X8721	R CHIP METAL 100K 5%1/16W	1
R1419	409HB653	R,CARBON 150H 5% 1/4W	1
R1420	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R1421	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1422	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1423	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1424	404X8649	R CHIP METAL 100H 5%1/16W	1
R1425	409HB645	R,CARBON 68H 5% 1/4W	1
R1426	404X8657	R CHIP METAL 220H 5%1/16W	1
R1427	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R1428	404X8705	R CHIP METAL 22K 5%1/16W	1
R1429	404X8717	R CHIP METAL 68K 5%1/16W	1
R1433	404X8665	R CHIP METAL 470H 5%1/16W	1
R1434	404X8665	R CHIP METAL 470H 5%1/16W	1
R1435	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R1436	404X8697	R CHIP METAL 10K 5%1/16W	1
R1437	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1438	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1439	404X8721	R CHIP METAL 100K 5%1/16W	1
R1440	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1441	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1442	404X8693	R CHIP METAL 6.8K 5%1/16W	1
R1443	404X8745	R CHIP METAL 1.0M 5%1/16W	1
R1444	404X8695	R CHIP METAL 8.2K 5%1/16W	1
R1445	404X8691	R CHIP METAL 5.6K 5%1/16W	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1446	404X8697	R CHIP METAL 10K 5%1/16W	1
R1447	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1448	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1449	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1450	404X8657	R CHIP METAL 220H 5%1/16W	1
R1451	404X8664	R CHIP METAL 430H 5%1/16W	1
R1452	404X8657	R CHIP METAL 220H 5%1/16W	1
R1454	404X8679	R CHIP METAL 1.8K 5%1/16W	1
R1455	404X8691	R CHIP METAL 5.6K 5%1/16W	1
R1456	404X8657	R CHIP METAL 220H 5%1/16W	1
R1457	404X8697	R CHIP METAL 10K 5%1/16W	1
R1458	404X8697	R CHIP METAL 10K 5%1/16W	1
R1459	404X8665	R CHIP METAL 470H 5%1/16W	1
R1460	401KE665	R,CARBON 470H 5% 1/6W	1
R1461	404X8693	R CHIP METAL 6.8K 5%1/16W	1
R1462	404X8693	R CHIP METAL 6.8K 5%1/16W	1
R1463	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1464	404X8709	R CHIP METAL 33K 5%1/16W	1
R1465	404X8721	R CHIP METAL 100K 5%1/16W	1
R1466	404X8693	R CHIP METAL 6.8K 5%1/16W	1
R1467	404X8721	R CHIP METAL 100K 5%1/16W	1
R1469	409HB641	R,CARBON 47H 5% 1/4W	1
R1470	404X8707	R CHIP METAL 27K 5%1/16W	1
R1471	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R1472	404X8669	R CHIP METAL 680H 5%1/16W	1
R1473	404X8683	R CHIP METAL 2.7K 5%1/16W	1
R1474	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R1475	404X8691	R CHIP METAL 5.6K 5%1/16W	1
R1476	404X8725	R CHIP METAL 150K 5%1/16W	1
R1477	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1478	404X8697	R CHIP METAL 10K 5%1/16W	1
R1479	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1480	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1481	404X8801	R,CHIP METAL 000H JOUMPER	1
R1482	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R1484	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1485	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1486	404X8657	R CHIP METAL 220H 5%1/16W	1
R1487	404X8657	R CHIP METAL 220H 5%1/16W	1
R1488	404X8697	R CHIP METAL 10K 5%1/16W	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1489	404X8659	R CHIP METAL 270H 5%1/16W	1
R1492	404X8697	R CHIP METAL 10K 5%1/16W	1
R1493	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R1494	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R1503	404X8657	R CHIP METAL 220H 5%1/16W	1
R1504	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1505	404X8721	R CHIP METAL 100K 5%1/16W	1
R1506	404X8683	R CHIP METAL 2.7K 5%1/16W	1
R1507	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1508	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1510	404X8697	R CHIP METAL 10K 5%1/16W	1
R1511	404X8669	R CHIP METAL 680H 5%1/16W	1
R1513	404X8665	R CHIP METAL 470H 5%1/16W	1
R1514	404X8665	R CHIP METAL 470H 5%1/16W	1
R1515	404X8724	R CHIP METAL 130K 5%1/16W	1
R1516	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R1518	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1519	404X8697	R CHIP METAL 10K 5%1/16W	1
R1520	404X8697	R CHIP METAL 10K 5%1/16W	1
R1521	404X8667	R CHIP METAL 560H 5%1/16W	1
R1523	404X8701	R CHIP METAL 15K 5%1/16W	1
R1524	404X8697	R CHIP METAL 10K 5%1/16W	1
R1525	404X8659	R CHIP METAL 270H 5%1/16W	1
R1526	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1527	404X8801	R CHIP METAL 000H JOUMPER	1
R1528	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R1529	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1530	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1531	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1532	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1533	404X8709	R CHIP METAL 33K 5%1/16W	1
R1534	404X8705	R CHIP METAL 22K 5%1/16W	1
R1535	404X8661	R CHIP METAL 330H 5%1/16W	1
R1536	404X8659	R CHIP METAL 270H 5%1/16W	1
R1537	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R1538	404X8707	R CHIP METAL 27K 5%1/16W	1
R1539	404X8697	R CHIP METAL 10K 5%1/16W	1
R1540	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1541	404X8663	R CHIP METAL 390H 5%1/16W	1
R1542	404X8633	R CHIP METAL 22H 5%1/16W	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1543	404X8669	R CHIP METAL 680H 5%1/16W	1
R1544	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1545	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R1546	404X8705	R CHIP METAL 22K 5%1/16W	1
R1547	404X8697	R CHIP METAL 10K 5%1/16W	1
R1548	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R1549	404X8667	R CHIP METAL 560H 5%1/16W	1
R1552	404X8707	R CHIP METAL 27K 5%1/16W	1
R1553	404X8697	R CHIP METAL 10K 5%1/16W	1
R1554	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1555	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1556	404X8709	R CHIP METAL 33K 5%1/16W	1
R1557	404X8701	R CHIP METAL 15K 5%1/16W	1
R1558	404X8665	R CHIP METAL 470H 5%1/16W	1
R1559	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R1560	404X8683	R CHIP METAL 2.7K 5%1/16W	1
R1561	404X8705	R CHIP METAL 22K 5%1/16W	1
R1562	404X8695	R CHIP METAL 8.2K 5%1/16W	1
R1563	401KE673	R.CARBON 1.0K 5% 1/6W	1
R1564	401KE701	R.CARBON 15K 5% 1/6W	1
R1566	401KE705	R.CARBON 22K 5% 1/6W	1
R1567	401KE691	R.CARBON 5.6K 5% 1/6W	1
R2	401KE697	R.CARBON 10K 5% 1/6W	1
R3	401KE675	R.CARBON 1.2K 5% 1/6W	1
R3	401KE689	R.CARBON 4.7K 5% 1/6W	1
R4	401KE645	R.CARBON 68H 5% 1/6W	1
R4	401KE697	R.CARBON 10K 5% 1/6W	1
R5	401KE649	R.CARBON 100H 5% 1/6W	1
R5	401KE697	R.CARBON 10K 5% 1/6W	1
R6	401KE705	R.CARBON 22K 5% 1/6W	1
R6	401KE713	R.CARBON 47K 5% 1/6W	1
R7	401KE681	R.CARBON 2.2K 5% 1/6W	1
R7	401KE705	R.CARBON 22K 5% 1/6W	1
*** CAPACITORS ***			
C1	429G6526	C.FILM 50V 0.12UF 5%	1
C1	430A8127	C.ELEC 50V 0.47UF	1
C1201	430A8103	C.ELEC 6.3V 47UF	1
C1202	421A0425	C.CERAMIC 50V 0.01UF	1
C1203	430A8129	C.ELEC 50V 2.2UF	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1204	423X1653	CC CHIP12 50V 150PF5%	1
C1205	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1206	430A8114	C,ELEC 25V 4.7UF	1
C1207	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1208	430A8112	C,ELEC 16V 47UF	1
C1209	421A0425	C,CERAMIC 50V 0.01UF	1
C1210	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1211	430A8105	C,ELEC 10V 22UF	1
C1212	430A8109	C,ELEC 16V 10UF	1
C1213	430A8109	C,ELEC 16V 10UF	1
C1214	430A8114	C,ELEC 25V 4.7UF	1
C1215	430A8103	C,ELEC 6.3V 47UF	1
C1216	421A0425	C,CERAMIC 50V 0.01UF	1
C1217	43026018	C,ELEC 10V 330UF	1
C1218	421A0425	C,CERAMIC 50V 0.01UF	1
C1219	423X1657	CC CHIP12 50V 220PF5%	1
C1220	423X1647	CC CHIP12 50V 82PF5%	1
C1221	423X1659	CC CHIP12 50V 270PF5%	1
C1222	423X1659	CC CHIP12 50V 270PF5%	1
C1223	423X1647	CC CHIP12 50V 82PF5%	1
C1224	423X1659	CC CHIP12 50V 270PF5%	1
C1225	423X1659	CC CHIP12 50V 270PF5%	1
C1226	423X1657	CC CHIP12 50V 220PF5%	1
C1227	430A8114	C,ELEC 25V 4.7UF	1
C1228	430A8114	C,ELEC 25V 4.7UF	1
C1229	430A8109	C,ELEC 16V 10UF	1
C1230	430A8114	C,ELEC 25V 4.7UF	1
C1231	433A4135	C,ELEC 16V 4.7UF-5BSRA	1
C1232	423X1659	CC CHIP12 50V 270PF5%	1
C1233	430A8114	C,ELEC 25V 4.7UF	1
C1234	421A0433	C,CERAMIC 50V 0.047UF	1
C1235	423X1653	CC CHIP12 50V 150PF5%	1
C1236	421A0433	C,CERAMIC 50V 0.047UF	1
C1237	423X1655	CC CHIP12 50V 180PF5%	1
C1238	423X1669	CC CHIP12 50V 680PF5%	1
C1239	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1240	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1241	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C1242	423X9697	CC CHIP12 JF50V0.01UF 80%	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1244	430A8114	C,ELEC 25V 4.7UF	1
C1245	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1246	423X1633	CC CHIP12 50V 22PF5%	1
C1247	423X1669	CC CHIP12 50V 680PF5%	1
C1248	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1249	423X1651	CC CHIP12 50V 120PF5%	1
C1252	423X1645	CC CHIP12 50V 68PF5%	1
C1253	423X1645	CC CHIP12 50V 68PF5%	1
C1254	430A8109	C,ELEC 16V 10UF	1
C1255	423X1645	CC CHIP12 50V 68PF5%	1
C1256	430A8109	C,ELEC 16V 10UF	1
C1257	430A8103	C,ELEC 6.3V 47UF	1
C1258	421A0425	C,CERAMIC 50V 0.01UF	1
C1259	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1260	423X1665	CC CHIP12 50V 470PF5%	1
C1261	423X1635	CC CHIP12 50V 27PF5%	1
C1263	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1264	423X1639	CC CHIP12 50V 39PF5%	1
C1265	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1266	430A8105	C,ELEC 10V 22UF	1
C1267	423X1665	CC CHIP12 50V 470PF5%	1
C1268	423X1617	CC CHIP12 50V 4.5PF D	1
C1269	423X1665	CC CHIP12 50V 470PF5%	1
C1270	423X1633	CC CHIP12 50V 22PF5%	1
C1271	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1272	423X1625	CC CHIP12 50V 10PF5%	1
C1273	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1274	423X1649	CC CHIP12 50V 100PF5%	1
C1275	430A8109	C,ELEC 16V 10UF	1
C1276	421A0425	C,CERAMIC 50V 0.01UF	1
C1277	423X1651	CC CHIP12 50V 120PF5%	1
C1278	423X1669	CC CHIP12 50V 680PF5%	1
C1279	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1280	423X1645	CC CHIP12 50V 68PF5%	1
C1282	423X1669	CC CHIP12 50V 680PF5%	1
C1283	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1286	430A8103	C,ELEC 6.3V 47UF	1
C1287	421A0425	C,CERAMIC 50V 0.01UF	1
C1296	423X9705	CC CHIP12 JF50V0.022UF80%	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1297	423X1647	CC CHIP12 50V 82PF5%	1
C1298	423X1635	CC CHIP12 50V 27PF5%	1
C1299	423X1641	CC CHIP12 50V 47PF5%	1
C1300	423X1659	CC CHIP12 50V 270PF5%	1
C1303	423X1633	CC CHIP12 50V 22PF5%	1
C1304	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1305	423X1651	CC CHIP12 50V 120PF5%	1
C1306	430A8105	C,ELEC 10V 22UF	1
C1308	423X1663	CC CHIP12 50V 390PF5%	1
C1313	423X1635	CC CHIP12 50V 27PF5%	1
C1314	430A8105	C,ELEC 10V 22UF	1
C1315	430A8109	C,ELEC 16V 10UF	1
C1316	423X1641	CC CHIP12 50V 47PF5%	1
C1318	430A8105	C,ELEC 10V 22UF	1
C1319	430A8105	C,ELEC 10V 22UF	1
C1320	429C0337	C,CERAMIC 25V 0.1UF	1
C1401	430A8110	C,ELEC 16V 22UF	1
C1403	430A8109	C,ELEC 16V 10UF	1
C1404	430A8110	C,ELEC 16V 22UF	1
C1405	430A8105	C,ELEC 10V 22UF	1
C1406	430A8109	C,ELEC 16V 10UF	1
C1412	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1413	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1414	430A8126	C,ELEC 50V 0.33UF	1
C1415	430A8114	C,ELEC 25V 4.7UF	1
C1416	430A8112	C,ELEC 16V 47UF	1
C1417	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1418	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1419	430A8112	C,ELEC 16V 47UF	1
C1420	423X2651	CC CHIP12 N00050V 120PF5%	1
C1421	423X2635	CC CHIP12 N00050V 27PF 5%	1
C1422	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1425	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1427	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1428	430A8110	C,ELEC 16V 22UF	1
C1430	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1431	430A8105	C,ELEC 10V 22UF	1
C1432	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1433	430A8109	C,ELEC 16V 10UF	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1434	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1435	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1438	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1439	423X9721	CC CHIP12 JF50V 0.1UF 80%	1
C1440	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1441	430A8110	C,ELEC 16V 22UF	1
C1442	429G8459	C,FILM 50V 220PF 5%	1
C1443	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1444	430A8109	C,ELEC 16V 10UF	1
C1445	429G8459	C,FILM 50V 220PF 5%	1
C1446	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1447	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1448	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1449	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1450	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1451	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1452	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C1453	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1454	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1455	430A8126	C,ELEC 50V 0.33UF	1
C1456	423X8909	C,CERAMIC 50V 0.03UF	1
C1457	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1458	423X1661	CC CHIP12 50V 330PF5%	1
C1459	430A8103	C,ELEC 6.3V 47UF	1
C1460	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1461	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1462	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1463	430A8125	C,ELEC 50V 0.22UF	1
C1464	430A8128	C,ELEC 50V 1UF	1
C1465	430A8103	C,ELEC 6.3V 47UF	1
C1467	423X1617	CC CHIP12 50V 4.5PF D	1
C1468	423X1673	CC CHIP12 50V1000PF5%	1
C1469	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1470	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1471	423X1645	CC CHIP12 50V 68PF5%	1
C1472	423X9689	CC CHIP12 JF50V4700PF 80%	1
C1473	423A2045	C,CERAMIC 50V 100PF	1
C1474	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1475	423X9697	CC CHIP12 JF50V0.01UF 80%	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1476	423X9713	CC CHIP12 JF50V0.047UF80%	1
C1477	423X1673	CC CHIP12 50V1000PF5%	1
C1478	430A8103	C,ELEC 6.3V 47UF	1
C1479	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1480	430A8109	C,ELEC 16V 10UF	1
C1481	430A8129	C,ELEC 50V 2.2UF	1
C1482	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1483	430A8111	C,ELEC 16V 33UF	1
C1484	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1485	430A8103	C,ELEC 6.3V 47UF	1
C1486	430A8104	C,ELEC 6.3V 100UF	1
C1488	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1489	423X1655	CC CHIP12 50V 180PF5%	1
C1490	423X1653	CC CHIP12 50V 150PF5%	1
C1491	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1492	423X9713	CC CHIP12 JF50V0.047UF80%	1
C1493	423X9705	CC CHIP12 JF50V0.022UF80%	1
C1494	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1498	430A8103	C,ELEC 6.3V 47UF	1
C1502	430A8105	C,ELEC 10V 22UF	1
C1504	430A8105	C,ELEC 10V 22UF	1
C1505	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1506	430A8110	C,ELEC 16V 22UF	1
C1507	430A8105	C,ELEC 10V 22UF	1
C1508	430A8105	C,ELEC 10V 22UF	1
C1509	430A8105	C,ELEC 10V 22UF	1
C1510	430A8110	C,ELEC 16V 22UF	1
C1511	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1512	423X1617	CC CHIP12 50V 4.5PF D	1
C1513	433A4137	C,ELEC 16V 10UF-5BSRA	1
C1514	430A8107	C,ELEC 10V 47UF	1
C1515	423X1651	CC CHIP12 50V 120PF5%	1
C1516	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1517	430A8110	C,ELEC 16V 22UF	1
C1518	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1519	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1520	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1521	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1522	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1523	423X9697	CC CHIP12 JF50V0.01UF 80%	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1524	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1526	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1527	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1529	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1530	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1531	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1532	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1533	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C1534	421CB021	C,CERAMIC 50V 22 PF	1
C1536	430A8103	C,ELEC 6.3V 47UF	1
C1537	421CB208	C,CERAMIC 50V 3.9 PF	1
C1538	430A8113	C,ELEC 16V 100UF	1
C1539	421CB862	C,CERAMIC 25V 0.01UF	1
C1540	421CB862	C,CERAMIC 25V 0.01UF	1
C1541	421CB862	C,CERAMIC 25V 0.01UF	1
C1542	430A8109	C,ELEC 16V 10UF	1
C3	421CB863	C,CERAMIC 25V 0.022UF	1
C4	421CB862	C,CERAMIC 25V 0.01UF	1
C5	421CB862	C,CERAMIC 25V 0.01UF	1
VC1401	421CB019	C,CERAMIC 50V 18 PF	1

MODEL : PRE AMP PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** ICS ***

IC501	37101408	IC AN3334K S-VHS PRE AMP	1
IC502	37101325	IC UPC2304CA (HEAD AMP)	1

*** TRANSISTORS ***

TR501	356D0501	DTC124EK(0°)	1
TR502	355K2125	DTA114ES.AT	1
TR503	356D0501	DTC124EK(0°)	1

*** DIODES ***

D501	360K3981	DIODE DAP202K-P(0°)35V,AT	1
D502	360K3976	DIODE 1S2837,AT	1
D503	360K3976	DIODE 1S2837,AT	1
D504	360K3981	DIODE DAP202K-P(0°)35V,AT	1

*** VARIABLE RESISTORS ***

VR501	41951196	R,VARIABLE 2.2K	1
VR502	41951196	R,VARIABLE 2.2K	1

*** COILS & FILTERS ***

L501	610G1829	FILTER COIL 0405 100UH,AT	1
L502	610G1829	FILTER COIL 0405 100UH,AT	1
L503	610G1821	FILTER COIL 0405 22UH,AT	1
L504	610G1821	FILTER COIL 0405 22UH,AT	1

*** RESISTORS ***

R501	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R502	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R503	404X8671	R CHIP METAL 820H 5%1/16W	1
R504	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R505	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R506	404X8671	R CHIP METAL 820H 5%1/16W	1
R507	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R508	404X8653	R CHIP METAL 150H 5%1/16W	1
R509	404X8667	R CHIP METAL 560H 5%1/16W	1
R510	404X8657	R CHIP METAL 220H 5%1/16W	1
R511	404X8663	R CHIP METAL 390H 5%1/16W	1
R512	404X8625	R CHIP METAL 10H 5%1/16W	1
R513	404X8625	R CHIP METAL 10H 5%1/16W	1

MODEL : PRE AMP PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

R514	404X8663	R CHIP METAL 390H 5%1/16W	1
R515	404X8655	R CHIP METAL 180H 5%1/16W	1
R516	404X8625	R CHIP METAL 10H 5%1/16W	1
R517	404X8625	R CHIP METAL 10H 5%1/16W	1
R518	404X8711	R CHIP METAL 39K 5%1/16W	1
R519	404X8711	R CHIP METAL 39K 5%1/16W	1
R520	404X8661	R CHIP METAL 330H 5%1/16W	1
R521	404X8661	R CHIP METAL 330H 5%1/16W	1
R522	404X8657	R CHIP METAL 220H 5%1/16W	1
R523	404X8669	R CHIP METAL 680H 5%1/16W	1
R524	404X8801	R,CHIP METAL 000H JOUMPER	1
R525	404X8625	R CHIP METAL 10H 5%1/16W	1
R526	404X8625	R CHIP METAL 10H 5%1/16W	1
R527	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R528	404X8693	R CHIP METAL 6.8K 5%1/16W	1
R529	404X8699	R CHIP METAL 12K 5%1/16W	1
R530	404X8643	R CHIP METAL 56H 5%1/16W	1
R531	404X8673	R CHIP METAL 1.0H 5%1/16W	1

*** CAPACITORS ***

C501	423X9705	CC CHIP12 JF50V0.022UF80%	1
C502	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C503	430A8103	C,ELEC 6.3V 47UF	1
C504	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C505	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C506	423X1673	CC CHIP12 50V1000PF5%	1
C507	430A8128	C,ELEC 50V 1UF	1
C509	421CB020	C,CERAMIC 50V 20 PF	1
C510	423X1673	CC CHIP12 50V1000PF5%	1
C511	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C512	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C513	423X1629	CC CHIP12 50V 15PF 5%	1
C514	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C515	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C516	430A8112	C,ELEC 16V 47UF	1
C517	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C518	423X1673	CC CHIP12 50V1000PF5%	1
C519	430A8114	C,ELEC 25V 4.7UF	1
C523	423X9221	CC CHIP12 JF25V 0.1UF 80%	1

MODEL : PRE AMP PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C524	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C525	430A8114	C,ELEC 25V 4.7UF	1
C527	430A8114	C,ELEC 25V 4.7UF	1
C531	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C532	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C534	430A8114	C,ELEC 25V 4.7UF	1
C535	423X1673	CC CHIP12 50V1000PF5%	1
C536	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C537	423X9705	CC CHIP12 JF50V0.022UF80%	1
C538	430A8112	C,ELEC 16V 47UF	1
C539	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C540	430A8128	C,ELEC 50V 1UF	1
C541	423X9705	CC CHIP12 JF50V0.022UF80%	1
C542	423X9705	CC CHIP12 JF50V0.022UF80%	1
C543	430A8128	C,ELEC 50V 1UF	1
C544	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C545	423X1665	CC CHIP12 50V 470PF5%	1
C546	423X1665	CC CHIP12 50V 470PF5%	1
C547	430A8109	C,ELEC 16V 10UF	1
C548	423X9705	CC CHIP12 JF50V0.022UF80%	1
C549	430A8112	C,ELEC 16V 47UF	1
C550	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C551	423X9697	CC CHIP12 JF50V0.01UF 80%	1
C552	423X9697	CC CHIP12 JF50V0.01UF 80%	1

MODEL : FLYING ERASE PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** TRANSISTORS ***

TR601	355K2118	DTB143ES,AT(A-4.7K 500MA)	1
TR602	355D2716	TR,BA1F4M	1
TR603	355D2716	TR,BA1F4M	1
TR604	355D2716	TR,BA1F4M	1
TR605	355D3742	TR 2SC1741S(PQR),AT	1
TR606	355D2716	TR,BA1F4M	1
TR607	355D3742	TR 2SC1741S(PQR),AT	1
TR608	355K3042	TR 2SA854S (PQR),AT	1
TR609	355D3842	TR 2SC1740S (PQR),AT	1
TR610	355D3842	TR 2SC1740S (PQR),AT	1
TR611	355K3042	TR 2SA854S (PQR),AT	1
TR612	355D3742	TR 2SC1741S(PQR),AT	1

*** COILS & FILTERS ***

L601	610G1817	FILTER COIL 0405 10UH,AT	1
L602	610G1814	FILTER COIL 0405 5.6UH,AT	1

*** RESISTORS ***

R601	401KE713	R,CARBON 47K 5% 1/6W	1
R602	401KE697	R,CARBON 10K 5% 1/6W	1
R603	401KE697	R,CARBON 10K 5% 1/6W	1
R604	401KE705	R,CARBON 22K 5% 1/6W	1
R605	401KE701	R,CARBON 15K 5% 1/6W	1
R606	401KE645	R,CARBON 68H 5% 1/6W	1
R607	401KE683	R,CARBON 2.7K 5% 1/6W	1
R608	401KE675	R,CARBON 1.2K 5% 1/6W	1
R609	401KE701	R,CARBON 15K 5% 1/6W	1
R610	401KE701	R,CARBON 15K 5% 1/6W	1
R611	401KE661	R,CARBON 330H 5% 1/6W	1
R612	401KE675	R,CARBON 1.2K 5% 1/6W	1
R613	401KE645	R,CARBON 68H 5% 1/6W	1
R614	401KE665	R,CARBON 470H 5% 1/6W	1
R615	401KE673	R,CARBON 1.0K 5% 1/6W	1
R616	401KE689	R,CARBON 4.7K 5% 1/6W	1
R617	401KE689	R,CARBON 4.7K 5% 1/6W	1
R618	401KE673	R,CARBON 1.0K 5% 1/6W	1
R619	401KE633	R,CARBON 22H 5% 1/6W	1
R620	401KE633	R,CARBON 22H 5% 1/6W	1

MODEL : FLYING ERASE PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** CAPACITORS ***

C601	421CB863	C.CERAMIC 25V 0.022UF	1
C602	421CB033	C.CERAMIC 50V 68 PF	1
C603	421CB037	C.CERAMIC 50V 100PF	1
C604	421CB029	C.CERAMIC 50V 47 PF	1
C605	421CB461	C.CERAMIC 16V 0.01UF	1
C606	421CB035	C.CERAMIC 50V 82 PF	1
C607	421CB461	C.CERAMIC 16V 0.01UF	1
C608	421CB461	C.CERAMIC 16V 0.01UF	1
C611	421CB034	C.CERAMIC 50V 75 PF	1
C612	421CB212	C.CERAMIC 50V 8.2 PF	1
C613	421CB863	C.CERAMIC 25V 0.022UF	1

MODEL : AUDIO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** ICS ***

IC4001	37101347	IC BA7767AS (AUDIO)	1
IC4002	37101421	IC BA7755A (SWITCH)	1
IC4101	37101403	HIC EHM-GJC93C22K(PAL-1)	1

*** TRANSISTORS ***

Q4001	35055312	TR 2SC2001 L	1
Q4002	355D2716	TR,BA1F4M	1
Q4003	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q4004	355D2716	TR,BA1F4M	1
Q4005	355D2716	TR,BA1F4M	1
Q4006	35055312	TR 2SC2001 L	1
Q4007	355D2716	TR,BA1F4M	1
Q4008	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q4009	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q4011	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q4101	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q4102	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q4103	355D2716	TR,BA1F4M	1
Q4104	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q4105	355D2723	TR,BB1A3Z	1
Q4106	355D2723	TR,BB1A3Z	1
Q4109	355D2716	TR,BA1F4M	1
Q4110	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q4111	355D2716	TR,BA1F4M	1

*** DIODES ***

D4001	360KA025	DIODE 1SS133	1
D4002	360KA025	DIODE 1SS133	1
D4003	360KA025	DIODE 1SS133	1
D4004	360KA025	DIODE 1SS133	1
D4005	360KA025	DIODE 1SS133	1
D4101	360KA025	DIODE 1SS133	1
D4102	360KA025	DIODE 1SS133	1

MODEL : AUDIO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** VARIABLE RESISTORS ***

VR4001	41951200	R,VARIABLE 10K	1
VR4002	41951206	R,VARIABLE 100K	1
VR4101	41951198	R,VARIABLE 4.7K	1
VR4102	41951198	R,VARIABLE 4.7K	1

*** COILS & FILTERS ***

FL4101	61911228	LOW PASS FILTER (20K-2)	1
FL4102	61911228	LOW PASS FILTER (20K-2)	1
FL4103	61815215	B.P.F 1.4M-07 (M)	1
FL4104	61815216	B.P.F 1.8M-07 (M)	1
L4001	610E2100	FILTER COIL 822J,AT	1
L4002	610G1529	FILTER COIL 100UH AT (S)	1
L4003	610G1529	FILTER COIL 100UH AT (S)	1
L4101	610G1631	FILTER COIL 150UH AT (S)	1
L4102	610G1631	FILTER COIL 150UH AT (S)	1
L4103	610G1625	FILTER COIL 47UH AT (S)	1
T4001	61911237	OSC COIL	1
T4002	61911238	OSC COIL	1

*** RESISTORS ***

R4001	401KE625	R,CARBON 10H 5% 1/6W	1
R4002	401KE705	R,CARBON 22K 5% 1/6W	1
R4003	401KE678	R,CARBON 1.6K 5% 1/6W	1
R4004	401KE702	R,CARBON 16K 5% 1/6W	1
R4005	401KE695	R,CARBON 8.2K 5% 1/6W	1
R4006	401KE737	R,CARBON 470K 5% 1/6W	1
R4007	401KE669	R,CARBON 680H 5% 1/6W	1
R4008	401KE715	R,CARBON 56K 5% 1/6W	1
R4009	401KE679	R,CARBON 1.8K 5% 1/6W	1
R4010	401KE745	R,CARBON 1.0M 5% 1/6W	1
R4011	401KE687	R,CARBON 3.9K 5% 1/6W	1
R4012	401KE710	R,CARBON 36K 5% 1/6W	1
R4013	401KE704	R,CARBON 20K 5% 1/6W	1
R4014	401KE715	R,CARBON 56K 5% 1/6W	1
R4015	401KE715	R,CARBON 56K 5% 1/6W	1
R4016	401KE707	R,CARBON 27K 5% 1/6W	1
R4018	401KE697	R,CARBON 10K 5% 1/6W	1
R4019	401KE680	R,CARBON 2.0K 5% 1/6W	1

MODEL : AUDIO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

R4020	401KE672	R,CARBON 910H 5% 1/6W	1
R4021	401KE651	R,CARBON 120H 5% 1/6W	1
R4022	401KE665	R,CARBON 470H 5% 1/6W	1
R4023	401KE671	R,CARBON 820H 5% 1/6W	1
R4024	401KE705	R,CARBON 22K 5% 1/6W	1
R4025	401KE705	R,CARBON 22K 5% 1/6W	1
R4026	401KE609	R,CARBON 2.2H 5% 1/6W	1
R4029	401KE656	R,CARBON 200H 5% 1/6W	1
R4030	401KE697	R,CARBON 10K 5% 1/6W	1
R4031	401KE697	R,CARBON 10K 5% 1/6W	1
R4032	401KE710	R,CARBON 36K 5% 1/6W	1
R4033	401KE705	R,CARBON 22K 5% 1/6W	1
R4034	401KE609	R,CARBON 2.2H 5% 1/6W	1
R4043	401KE697	R,CARBON 10K 5% 1/6W	1
R4101	401KE725	R,CARBON 150K 5% 1/6W	1
R4102	401KE725	R,CARBON 150K 5% 1/6W	1
R4103	401KE725	R,CARBON 150K 5% 1/6W	1
R4104	401KE725	R,CARBON 150K 5% 1/6W	1
R4107	401KE691	R,CARBON 5.6K 5% 1/6W	1
R4108	401KE691	R,CARBON 5.6K 5% 1/6W	1
R4109	401KE674	R,CARBON 1.1K 5% 1/6W	1
R4110	401KE674	R,CARBON 1.1K 5% 1/6W	1
R4111	401KE697	R,CARBON 10K 5% 1/6W	1
R4112	401KE697	R,CARBON 10K 5% 1/6W	1
R4113	401KE680	R,CARBON 2.0K 5% 1/6W	1
R4114	401KE697	R,CARBON 10K 5% 1/6W	1
R4115	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4116	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4117	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4118	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4119	401KE697	R,CARBON 10K 5% 1/6W	1
R4120	401KE697	R,CARBON 10K 5% 1/6W	1
R4121	401KE655	R,CARBON 180H 5% 1/6W	1
R4123	401KE721	R,CARBON 100K 5% 1/6W	1
R4124	401KE721	R,CARBON 100K 5% 1/6W	1
R4125	401KE667	R,CARBON 560H 5% 1/6W	1
R4126	401KE667	R,CARBON 560H 5% 1/6W	1
R4127	401KE697	R,CARBON 10K 5% 1/6W	1
R4128	401KE697	R,CARBON 10K 5% 1/6W	1

MODEL : AUDIO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R4129	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4130	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4131	401KE713	R,CARBON 47K 5% 1/6W	1

*** CAPACITORS ***

C4001	429G8253	C,METAL FILM 50V 1500PF	1
C4002	429G8257	C,METAL FILM 50V 3300PF	1
C4004	439A1602	C,ELEC 1UF 50V	1
C4005	429G8261	C,METAL FILM 50V 6800PF	1
C4006	430A8114	C,ELEC 25V 4.7UF	1
C4007	430A8128	C,ELEC 50V 1UF	1
C4008	430A8112	C,ELEC 16V 47UF	1
C4009	430A8128	C,ELEC 50V 1UF	1
C4010	421CB045	C,CERAMIC 50V 470PF	1
C4011	421CB040	C,CERAMIC 50V 180PF	1
C4012	421CB040	C,CERAMIC 50V 180PF	1
C4013	421CB043	C,CERAMIC 50V 330PF	1
C4014	430A8129	C,ELEC 50V 2.2UF	1
C4015	429G8267	C,METAL FILM 50V 0.022UF	1
C4016	429G8265	C,METAL FILM 50V 0.015UF	1
C4017	429G6549	CQ92V1H681J.AT	1
C4018	429G8261	C,METAL FILM 50V 6800PF	1
C4019	439A1583	C,ELEC 10UF 16V	1
C4020	430A8114	C,ELEC 25V 4.7UF	1
C4021	430A8113	C,ELEC 16V 100UF	1
C4022	430A8111	C,ELEC 16V 33UF	1
C4023	430A8110	C,ELEC 16V 22UF	1
C4024	421CB049	C,CERAMIC 50V 1000PF	1
C4025	421CB461	C,CERAMIC 16V 0.01UF	1
C4026	421CB041	C,CERAMIC 50V 220PF	1
C4027	429G8614	C,FILM 100V 0.039UF	1
C4028	423A1045	C,CERAMIC 50V 100PF	1
C4029	421A0433	C,CERAMIC 50V 0.047UF	1
C4030	429G8265	C,METAL FILM 50V 0.015UF	1
C4031	421CB047	C,CERAMIC 50V 680PF	1
C4032	421CB461	C,CERAMIC 16V 0.01UF	1
C4033	429G8611	C,FILM 100V 0.022UF	1
C4034	430A8110	C,ELEC 16V 22UF	1
C4101	439A2031	C,ELEC 50V 1UF	1
C4102	439A2031	C,ELEC 50V 1UF	1

MODEL : AUDIO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C4103	439A2031	C,ELEC 50V 1UF	1
C4104	439A2031	C,ELEC 50V 1UF	1
C4105	439A2028	C,ELEC 50V 0.33UF	1
C4106	439A2033	C,ELEC 50V 2.2UF	1
C4107	439A2005	C,ELEC 16V 47UF	1
C4108	439A2005	C,ELEC 16V 47UF	1
C4109	439A2031	C,ELEC 50V 1UF	1
C4110	439A2031	C,ELEC 50V 1UF	1
C4115	439A2005	C,ELEC 16V 47UF	1
C4116	439A2005	C,ELEC 16V 47UF	1
C4117	429G8255	C,METAL FILM 50V 2200PF	1
C4118	429G8255	C,METAL FILM 50V 2200PF	1
C4119	439A2001	C,ELEC 16V 10UF	1
C4120	439A2001	C,ELEC 16V 10UF	1
C4121	429G8263	C,METAL FILM 50V 0.01UF	1
C4122	429G8263	C,METAL FILM 50V 0.01UF	1
C4123	439A2013	C,ELEC 25V 33UF	1
C4124	439A2013	C,ELEC 25V 33UF	1
C4125	439A2018	C,ELEC 35V 4.7UF	1
C4126	439A2018	C,ELEC 35V 4.7UF	1
C4127	429G8267	C,METAL FILM 50V 0.022UF	1
C4128	429G8267	C,METAL FILM 50V 0.022UF	1
C4129	439A2003	C,ELEC 16V 22UF	1
C4130	439A2003	C,ELEC 16V 22UF	1
C4131	43911525	C,ELEC 50V 47UF A(AWD)	1
C4132	439A2005	C,ELEC 16V 47UF	1
C4133	43911525	C,ELEC 50V 47UF A(AWD)	1
C4134	439A2005	C,ELEC 16V 47UF	1
C4135	439A2003	C,ELEC 16V 22UF	1
C4136	439A2003	C,ELEC 16V 22UF	1
C4137	439A2005	C,ELEC 16V 47UF	1
C4138	429G8252	C,METAL FILM 50V 1200PF	1
C4139	439A2018	C,ELEC 35V 4.7UF	1
C4140	439A2009	C,ELEC 25V 6.8UF	1
C4141	439A2005	C,ELEC 16V 47UF	1
C4143	439A2018	C,ELEC 35V 4.7UF	1
C4144	439A2018	C,ELEC 35V 4.7UF	1
C4145	421CB034	C,CERAMIC 50V 75 PF	1
C4146	421CB027	C,CERAMIC 50V 39 PF	1

MODEL : AUDIO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C4147	421CB037	C,CERAMIC 50V 100PF	1
C4148	439A2005	C,ELEC 16V 47UF	1
C4149	439A2005	C,ELEC 16V 47UF	1

MODEL : H.P/VIDEO SW PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS ***			
IC4151	37101322	IC M5222L (VOL)	1
IC4152	37901081	IC M5218 L(SIP)	1
IC4201	37101159	LA7016 ANALOG SW	1

*** TRANSISTORS ***

Q4151	355D2723	TR,BB1A3Z	1
Q4152	355D2723	TR,BB1A3Z	1
Q4201	35902911	TR,2SA 952 K	1
Q4202	35902911	TR,2SA 952 K	1
Q4203	35902911	TR,2SA 952 K	1
Q4205	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q4206	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q4207	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q4208	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q4209	35902911	TR,2SA 952 K	1
Q4210	355D2716	TR,BA1F4M	1
Q4211	355D2716	TR,BA1F4M	1
Q4212	355D2716	TR,BA1F4M	1
Q4213	355D2716	TR,BA1F4M	1
Q4214	355K2110	TR,BN1F4M(A,22K)AT	1
Q4215	355D2716	TR,BA1F4M	1
Q4216	355K2113	DTR UN4122(PNP 4.7K),AT	1
Q4217	35541931	TR,2SC2785(E,F,H,J)	1

*** DIODES ***

D4151	360KA025	DIODE 1SS133	1
-------	----------	--------------	---

*** COILS & FILTERS ***

L4203	61071821	FILTER COIL 0405 22UH	1
-------	----------	-----------------------	---

*** RESISTORS ***

R4151	401KE697	R,CARBON 10K 5% 1/6W	1
R4152	401KE697	R,CARBON 10K 5% 1/6W	1
R4153	401KE704	R,CARBON 20K 5% 1/6W	1
R4154	401KE704	R,CARBON 20K 5% 1/6W	1
R4155	401KE712	R,CARBON 43K 5% 1/6W	1
R4156	401KE708	R,CARBON 30K 5% 1/6W	1
R4157	401KE708	R,CARBON 30K 5% 1/6W	1

MODEL: H.P/VIDEO SW PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R4158	401KE710	R,CARBON 36K 5% 1/6W	1
R4159	401KE697	R,CARBON 10K 5% 1/6W	1
R4160	401KE697	R,CARBON 10K 5% 1/6W	1
R4161	401KE685	R,CARBON 3.3K 5% 1/6W	1
R4162	401KE685	R,CARBON 3.3K 5% 1/6W	1
R4163	401KE697	R,CARBON 10K 5% 1/6W	1
R4164	401KE697	R,CARBON 10K 5% 1/6W	1
R4165	401KE651	R,CARBON 120H 5% 1/6W	1
R4166	401KE651	R,CARBON 120H 5% 1/6W	1
R4201	40185665	R,CARBON 470H 5% 1/2W	1
R4203	401KE717	R,CARBON 68K 5% 1/6W	1
R4204	401KE703	R,CARBON 18K 5% 1/6W	1
R4205	401KE717	R,CARBON 68K 5% 1/6W	1
R4207	401KE703	R,CARBON 18K 5% 1/6W	1
R4208	409HB673	R,CARBON 1.0K 5% 1/4W	1
R4212	409HB673	R,CARBON 1.0K 5% 1/4W	1
R4219	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4220	401KE670	R,CARBON 750H 5% 1/6W	1
R4221	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4222	401KE678	R,CARBON 1.6K 5% 1/6W	1
R4223	401KE721	R,CARBON 100K 5% 1/6W	1
R4224	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4225	401KE681	R,CARBON 2.2K 5% 1/6W	1
R4226	401KE679	R,CARBON 1.8K 5% 1/6W	1
R4231	40121157	R,CARBON 220H 5% 1/2W	1
R4232	401KE649	R,CARBON 100H 5% 1/6W	1
R4232	401KE670	R,CARBON 750H 5% 1/6W	1
R4233	401KE670	R,CARBON 750H 5% 1/6W	1
R4234	401KE729	R,CARBON 220K 5% 1/6W	1
R4235	401KE646	R,CARBON 75H 5% 1/6W	1

*** CAPACITORS ***

C4151	439A2033	C,ELEC 50V 2.2UF	1
C4152	439A2033	C,ELEC 50V 2.2UF	1
C4153	439A2003	C,ELEC 16V 22UF	1
C4154	439A2031	C,ELEC 50V 1UF	1
C4155	439A2005	C,ELEC 16V 47UF	1
C4156	439A2005	C,ELEC 16V 47UF	1
C4157	439A2003	C,ELEC 16V 22UF	1

MODEL: H.P/VIDEO SW PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C4158	439A2003	C,ELEC 16V 22UF	1
C4159	439A2005	C,ELEC 16V 47UF	1
C4160	439A2005	C,ELEC 16V 47UF	1
C4201	43983307	C,ELEC 6.3V 1000UF	1
C4202	430A8112	C,ELEC 16V 47UF	1
C4203	421A0425	C,CERAMIC 50V 0.01UF	1
C4204	429C0333	C,CERAMIC 25V 0.047UF	1
C4206	429C0333	C,CERAMIC 25V 0.047UF	1
C4208	421CB461	C,CERAMIC 16V 0.01UF	1
C4209	430A8113	C,ELEC 16V 100UF	1
C4210	430A8104	C,ELEC 6.3V 100UF	1
C4211	421CB461	C,CERAMIC 16V 0.01UF	1
C4212	430A8109	C,ELEC 16V 10UF	1
C4213	430A8109	C,ELEC 16V 10UF	1
C4214	430A8109	C,ELEC 16V 10UF	1
C4215	43983307	C,ELEC 6.3V 1000UF	1
C4216	421CB031	C,CERAMIC 50V 56 PF	1

MODEL : TIMER/FUNC PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** ICS ***

IC2001	37151473	MOSUPD75216ACW-202DX4000T	1
IC2003	37101286	IC M5278L56	1
IC2004	37151457	IC MSC1124RS (VU DRIVER)	1

*** TRANSISTORS ***

Q2001	355K2120	DTA124TS, AT(A, 22K)	1
Q2002	355D2716	TR, BA1F4M	1
Q2003	355D2716	TR, BA1F4M	1
Q2015	355K2110	TR, BN1F4M(A, 22K) AT	1
Q2021	355K2110	TR, BN1F4M(A, 22K) AT	1
Q2022	355K2110	TR, BN1F4M(A, 22K) AT	1
Q2023	355K2110	TR, BN1F4M(A, 22K) AT	1
Q2032	355B1117	TR, 2SB1238 (Q) AT	1

*** DIODES ***

D2001	360KA025	DIODE 1SS133	1
D2002	360KA025	DIODE 1SS133	1
D2003	360KA025	DIODE 1SS133	1
D2004	360KA025	DIODE 1SS133	1
D2005	360KA025	DIODE 1SS133	1
D2007	360KA025	DIODE 1SS133	1
D2008	360KA025	DIODE 1SS133	1
D2009	360KA025	DIODE 1SS133	1
D2010	360KA025	DIODE 1SS133	1
D2011	360KA025	DIODE 1SS133	1
D2012	360KA025	DIODE 1SS133	1
D2013	360KA025	DIODE 1SS133	1
D2014	360KA025	DIODE 1SS133	1
D2015	360KA025	DIODE 1SS133	1
D2017	360KA025	DIODE 1SS133	1
D2018	360KA025	DIODE 1SS133	1
D2019	360KA025	DIODE 1SS133	1
D2020	360KA025	DIODE 1SS133	1
D2023	360KA025	DIODE 1SS133	1
D2025	360KA025	DIODE 1SS133	1
D2030	360KA025	DIODE 1SS133	1
D2041	360KA025	DIODE 1SS133	1
D2042	360KA025	DIODE 1SS133	1

MODEL : TIMER/FUNC PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

D2043	360KA025	DIODE 1SS133	1
D2046	360KA025	DIODE 1SS133	1
LD2003	36904276	LED UMB SLR-34DC(N.P)	1
LD2004	36904263	LED RED SLR-34VC3	1
ZD2001	369KE492	ZENER DIODE RD9.1JSB3AT26	1
ZD2002	369KE474	ZENER DIODE RD5.1JSB3AT26	1
ZD2003	369KE521	ZENER DIODE RD24JSB2, AT26	1
ZD2004	369KE526	ZENER DIODE RD30JSB1, AT26	1
ZD2006	369KE482	ZENER DIODE RD6.8JSB2AT26	1

*** VARIABLE RESISTORS ***

VR2001	41504208	VR 10K-B (L=17.5)	1
--------	----------	-------------------	---

*** RELAYS & SWITCHES ***

SW2050	65180052	SLIDE SW 1-1-2	1
SW2051	65180052	SLIDE SW 1-1-2	1
SW2052	65180092	SLIDE SW 4-2 (H=17)	1
SW2055	65180052	SLIDE SW 1-1-2	1
SW2056	65180052	SLIDE SW 1-1-2	1

*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***

FD2001	67930096	FIP16QM6	1
JK2001	70905730	HEAD PHONE JACK 1406 (2)	1
JK2002	70905764	RCA 3P JACK (GOLD)	1
X2001	39080023	4.19MHZ RESONATOR	1
X2002	64004151	X'TAL 32.768KHZ	1
X2003	64004139	50HZ OSCILLATOR LQT-50X-1	1

*** RESISTORS ***

R2001	401KE649	R, CARBON 100H 5% 1/6W	1
R2002	401KE733	R, CARBON 330K 5% 1/6W	1
R2003	401KE738	R, CARBON 510K 5% 1/6W	1
R2004	401KE697	R, CARBON 10K 5% 1/6W	1
R2005	401KE717	R, CARBON 68K 5% 1/6W	1
R2006	401KE685	R, CARBON 3.3K 5% 1/6W	1
R2008	401KE721	R, CARBON 100K 5% 1/6W	1
R2009	401KE697	R, CARBON 10K 5% 1/6W	1
R2010	401KE697	R, CARBON 10K 5% 1/6W	1
R2011	401KE697	R, CARBON 10K 5% 1/6W	1

MODEL: SUB FUNCTION PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R2012	401KE697	R.CARBON 10K 5% 1/6W	1
R2014	401KE729	R.CARBON 220K 5% 1/6W	1
R2015	401KE697	R.CARBON 10K 5% 1/6W	1
R2016	401KE721	R.CARBON 100K 5% 1/6W	1
R2017	401KE721	R.CARBON 100K 5% 1/6W	1
R2021	401KE677	R.CARBON 1.5K 5% 1/6W	1
R2022	401KE677	R.CARBON 1.5K 5% 1/6W	1
R2027	401KE697	R.CARBON 10K 5% 1/6W	1
R2036	401KE657	R.CARBON 220H 5% 1/6W	1
R2037	401KE657	R.CARBON 220H 5% 1/6W	1
R2040	401KE717	R.CARBON 68K 5% 1/6W	1
R2042	401KE729	R.CARBON 220K 5% 1/6W	1
R2053	401KE697	R.CARBON 10K 5% 1/6W	1
R2058	401KE721	R.CARBON 100K 5% 1/6W	1
R2060	401KE681	R.CARBON 2.2K 5% 1/6W	1
R2061	401KE690	R.CARBON 5.1K 5% 1/6W	1
R2066	409HB649	R.CARBON 100H 5% 1/4W	1
R2067	409HB649	R.CARBON 100H 5% 1/4W	1
R2068	401KE685	R.CARBON 3.3K 5% 1/6W	1
R2069	401KE681	R.CARBON 2.2K 5% 1/6W	1
R2070	401KE681	R.CARBON 2.2K 5% 1/6W	1
R2072	401KE721	R.CARBON 100K 5% 1/6W	1
R2073	401KE721	R.CARBON 100K 5% 1/6W	1
R2076	401KE673	R.CARBON 1.0K 5% 1/6W	1
R2077	401KE661	R.CARBON 330H 5% 1/6W	1
R2078	401KE699	R.CARBON 12K 5% 1/6W	1
R2079	401KE697	R.CARBON 10K 5% 1/6W	1

*** CAPACITORS ***

C2001	430A8109	C.ELEC 16V 10UF	1
C2002	430A8124	C.ELEC 50V 0.1UF	1
C2003	421CB862	C.CERAMIC 25V 0.01UF	1
C2004	430A8351	C.ELEC 50V 3.3UF	1
C2005	430A8318	C.ELEC 16V 10UF	1
C2006	421CB863	C.CERAMIC 25V 0.022UF	1
C2007	421CB237	C.CERAMIC 50V 100PF	1
C2008	421CB237	C.CERAMIC 50V 100PF	1
C2009	421CB237	C.CERAMIC 50V 100PF	1
C2010	421CB237	C.CERAMIC 50V 100PF	1

MODEL : TIMER/FUNC PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C2012	421CB029	C.CERAMIC 50V 47 PF	1
C2013	421CB029	C.CERAMIC 50V 47 PF	1
C2014	430A8109	C.ELEC 16V 10UF	1
C2015	421CB863	C.CERAMIC 25V 0.022UF	1
C2016	421CB863	C.CERAMIC 25V 0.022UF	1
C2017	430A8348	C.ELEC 50V 1UF	1
C2018	430A8348	C.ELEC 50V 1UF	1
C2029	421CB237	C.CERAMIC 50V 100PF	1
C2030	421CB237	C.CERAMIC 50V 100PF	1
C2033	421CB237	C.CERAMIC 50V 100PF	1
C2034	430A8326	C.ELEC 25V 4.7UF	1
C2036	430A8348	C.ELEC 50V 1UF	1
C2037	430A8348	C.ELEC 50V 1UF	1
C2040	421CB461	C.CERAMIC 16V 0.01UF	1
C2043	421CB461	C.CERAMIC 16V 0.01UF	1
C2044	42121055	C.CERAMIC 50V 220PF	1
C2045	42121055	C.CERAMIC 50V 220PF	1
C2046	421CB237	C.CERAMIC 50V 100PF	1
C2047	42311100	C.CERAMIC 50V 390PF	1
C2048	42311100	C.CERAMIC 50V 390PF	1

MODEL : SUB FUNCTION PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** TRANSISTORS ***			
Q2025	355K2110	TR,BN1F4M(A,22K)AT	1
Q2026	355D2716	TR,BA1F4M	1
Q2027	355D2716	TR,BA1F4M	1
*** DIODES ***			
D2006	360KA009	DIODE 1S2473 AT26	1
D2044	360KA009	DIODE 1S2473 AT26	1
D2045	360KA009	DIODE 1S2473 AT26	1
*** VARIABLE RESISTORS ***			
VR2002	41504196	SLIDE VR RS30B 30MM 5KAX2	1
VR2003	41504204	VR 20K-B (L=17.5)	1
VR2004	41504205	VR 500K-B (L=17.5)	1
*** RELAYS & SWITCHES ***			
SW2026	65330070	TACT SW SKECAD	1
SW2035	65330070	TACT SW SKECAD	1
SW2038	65330071	TACT SWITCH EVQ-PAE-05R	1
SW2053	65180052	SLIDE SW 1-1-2	1
SW2054	65330067	PUSH SW SPPH2 (TYPE-A)	1
*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***			
U2001	79539009	IR RECIEVER SBX-1483-55	1
*** RESISTORS ***			
R2024	409HB729	R,CARBON 220K 5% 1/4W	1
R2074	409HB665	R,CARBON 470H 5% 1/4W	1
R2075	409HB665	R,CARBON 470H 5% 1/4W	1
*** CAPACITORS ***			
C2024	43920009	SUPER CAPASITOR FSOH104Z	1

MODEL : TUNER/IF PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** CRT & TUNER ***			
	34393026	U/V TUNER	1
*** ICS ***			
IC3001	37101328	IC M51365SP(PLL VIF/SIF)	1
IC3002	37903162	IC LA7910 (X0260C)	1
IC3003	37101284	IC LA7210	1
IC3004	37101127	IC UPC-393C	1
IC3005	37151428	MOS M6M80021P (E2PROM 2K)	1
ZD3001	37101436	IC UPC574J(MB)	1
*** TRANSISTORS ***			
TR3001	35940502	TR,2SC1730 L	1
TR3002	355D1931	TR,2SC2785(E,F,H,J)AT	1
TR3003	355D1931	TR,2SC2785(E,F,H,J)AT	1
TR3004	35940502	TR,2SC1730 L	1
TR3005	35055312	TR 2SC2001 L	1
TR3006	355K1131	TR,2SA1175 (E,F,H,J)	1
TR3007	355D2711	DTC144ES,AT	1
TR3008	35058012	TR 2SC2352 L	1
TR3009	355D2711	DTC144ES,AT	1
*** DIODES ***			
D3002	360KA025	DIODE 1SS133	1
D3003	360KA025	DIODE 1SS133	1
D3004	360KA025	DIODE 1SS133	1
D3005	360KA025	DIODE 1SS133	1
D3006	360KA025	DIODE 1SS133	1
ZD3002	369KE494	ZENER DIODE RD10JSB2,AT26	1
*** VARIABLE RESISTORS ***			
VR3101	41951194	R,VARIABLE 1K	1
*** COILS & FILTERS ***			
FL3001	61138023	VIF SAWF SAF38.9MZR72Z	1
FL3003	61137037	CERAMIC TRAP TPS5.5MW	1
FL3004	61138024	SAWF SAF33.4MC70Z	1
L3001	610G1809	FILTER COIL 0405 2.2UH,AT	1
L3002	61011533	SAW COIL 2R2	1

MODEL : TUNER/IF PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
L3003	610G2776	COIL FILTER	1
L3009	610G2922	FILTER COIL ELEFT150KA	1
L3010	610G2912	FILTER COIL ELEFT 2R2MA	1
L3011	610G2908	FILTER COIL	1
L3012	610G2932	FILTER COIL ELEFT 101KA	1
L3013	610G2920	FILTER COIL ELEFT100KA	1
L3014	610G2920	FILTER COIL ELEFT100KA	1
T3001	61815201	VCO COIL (PAL)	1
T3002	61815209	VIF-T(9.5T,CH)	1
T3003	61815209	VIF-T(9.5T,CH)	1
*** ELECTRICAL PARTS & MISCELLANE OUS PARTS ***			
X3001	70780001	CABLE,CONNECTOR(150MM)	1
	39080012	CERAMIC RESO. CSB500E5	1
*** RESISTORS ***			
R3001	401KE649	R,CARBON 100H 5% 1/6W	1
R3002	401KE695	R,CARBON 8.2K 5% 1/6W	1
R3003	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3004	401KE641	R,CARBON 47H 5% 1/6W	1
R3005	401KE649	R,CARBON 100H 5% 1/6W	1
R3006	401KE655	R,CARBON 180H 5% 1/6W	1
R3007	401KE669	R,CARBON 680H 5% 1/6W	1
R3009	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3010	401KE705	R,CARBON 22K 5% 1/6W	1
R3011	401KE691	R,CARBON 5.6K 5% 1/6W	1
R3012	401KE686	R,CARBON 3.6K 5% 1/6W	1
R3013	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3014	401KE693	R,CARBON 6.8K 5% 1/6W	1
R3015	401KE671	R,CARBON 820H 5% 1/6W	1
R3016	401KE743	R,CARBON 820K 5% 1/6W	1
R3017	401KE689	R,CARBON 4.7K 5% 1/6W	1
R3020	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3021	401KE653	R,CARBON 150H 5% 1/6W	1
R3022	401KE674	R,CARBON 1.1K 5% 1/6W	1
R3023	401KE657	R,CARBON 220H 5% 1/6W	1
R3024	401KE646	R,CARBON 75H 5% 1/6W	1
R3027	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3029	401KE733	R,CARBON 330K 5% 1/6W	1

MODEL : TUNER/IF PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R3033	401KE641	R,CARBON 47H 5% 1/6W	1
R3034	401KE667	R,CARBON 560H 5% 1/6W	1
R3035	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3036	401KE661	R,CARBON 330H 5% 1/6W	1
R3040	401KE641	R,CARBON 47H 5% 1/6W	1
R3041	401KE669	R,CARBON 680H 5% 1/6W	1
R3043	401KE649	R,CARBON 100H 5% 1/6W	1
R3045	40913109	R,CARBON 2.2H 5% 1/4W	1
R3046	40913109	R,CARBON 2.2H 5% 1/4W	1
R3047	40913109	R,CARBON 2.2H 5% 1/4W	1
R3050	401KE661	R,CARBON 330H 5% 1/6W	1
R3051	401KE687	R,CARBON 3.9K 5% 1/6W	1
R3052	401KE721	R,CARBON 100K 5% 1/6W	1
R3053	401KE721	R,CARBON 100K 5% 1/6W	1
R3054	401KE705	R,CARBON 22K 5% 1/6W	1
R3055	401KE705	R,CARBON 22K 5% 1/6W	1
R3056	401KE721	R,CARBON 100K 5% 1/6W	1
R3057	401KE684	R,CARBON 3.0K 5% 1/6W	1
R3058	401KE679	R,CARBON 1.8K 5% 1/6W	1
R3059	401KE713	R,CARBON 47K 5% 1/6W	1
R3063	40351182	R,METAL 2.4K 5% 1W	1
R3064	401KE697	R,CARBON 10K 5% 1/6W	1
R3065	401KE697	R,CARBON 10K 5% 1/6W	1
R3066	401KE705	R,CARBON 22K 5% 1/6W	1
R3067	401KE703	R,CARBON 18K 5% 1/6W	1
R3068	401KE703	R,CARBON 18K 5% 1/6W	1
R3069	401KE703	R,CARBON 18K 5% 1/6W	1
R3070	40809989	R,FUSE 2.2H 5% 1/4W	1
R3073	401KE675	R,CARBON 1.2K 5% 1/6W	1
R3074	401KE701	R,CARBON 15K 5% 1/6W	1
R3075	401KE661	R,CARBON 330H 5% 1/6W	1
R3076	401KE733	R,CARBON 330K 5% 1/6W	1
R3077	401KE717	R,CARBON 68K 5% 1/6W	1
R3078	401KE703	R,CARBON 18K 5% 1/6W	1
R3079	40913109	R,CARBON 2.2H 5% 1/4W	1
R3080	401KE697	R,CARBON 10K 5% 1/6W	1
R3081	401KE725	R,CARBON 150K 5% 1/6W	1
R3082	401KE727	R,CARBON 180K 5% 1/6W	1
R3083	401KE681	R,CARBON 2.2K 5% 1/6W	1

MODEL : TUNER/IF PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R3084	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3085	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3086	401KE729	R,CARBON 220K 5% 1/6W	1
R3087	401KE729	R,CARBON 220K 5% 1/6W	1
R3088	401KE689	R,CARBON 4.7K 5% 1/6W	1
R3089	401KE689	R,CARBON 4.7K 5% 1/6W	1
R3090	401KE697	R,CARBON 10K 5% 1/6W	1
R3092	401KE683	R,CARBON 2.7K 5% 1/6W	1
R3093	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3097	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3099	401KE721	R,CARBON 100K 5% 1/6W	1
R3100	401KE693	R,CARBON 6.8K 5% 1/6W	1

*** CAPACITORS ***

C3001	421CB862	C,CERAMIC 25V 0.01UF	1
C3002	421CB862	C,CERAMIC 25V 0.01UF	1
C3003	421CB862	C,CERAMIC 25V 0.01UF	1
C3004	421CB862	C,CERAMIC 25V 0.01UF	1
C3005	421CB862	C,CERAMIC 25V 0.01UF	1
C3007	430A8131	C,ELEC 50V 4.7UF	1
C3008	423A2037	C,CERAMIC 50V 47PF	1
C3009	423A2012	C,CERAMIC 50V 7PF	1
C3010	430A8127	C,ELEC 50V 0.47UF	1
C3011	430A8112	C,ELEC 16V 47UF	1
C3012	421CB862	C,CERAMIC 25V 0.01UF	1
C3015	430A8110	C,ELEC 16V 22UF	1
C3016	429G8269	C,METAL FILM 50V 0.033UF	1
C3017	430A8128	C,ELEC 50V 1UF	1
C3018	430A8112	C,ELEC 16V 47UF	1
C3019	421CB862	C,CERAMIC 25V 0.01UF	1
C3020	430A8114	C,ELEC 25V 4.7UF	1
C3021	423A6041	C,CERAMIC 50V 68PF	1
C3022	423A6003	C,CERAMIC 50V 3PF	1
C3024	421CB862	C,CERAMIC 25V 0.01UF	1
C3025	430A8112	C,ELEC 16V 47UF	1
C3029	421CB862	C,CERAMIC 25V 0.01UF	1
C3030	421CB862	C,CERAMIC 25V 0.01UF	1
C3031	421CB862	C,CERAMIC 25V 0.01UF	1
C3033	423A3029	C,CERAMIC 50V 18PF	1
C3034	423A2015	C,CERAMIC 50V 10PF	1

MODEL : TUNER/IF PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C3035	430A8110	C,ELEC 16V 22UF	1
C3036	421CB862	C,CERAMIC 25V 0.01UF	1
C3037	430A8128	C,ELEC 50V 1UF	1
C3038	43983367	C,ELEC 50V 47UF	1
C3039	429G6917	C,METAL FILM 50V 0.22UF	1
C3040	429G6917	C,METAL FILM 50V 0.22UF	1
C3041	429G6917	C,METAL FILM 50V 0.22UF	1
C3042	421CB049	C,CERAMIC 50V 1000PF	1
C3043	421CB043	C,CERAMIC 50V 330PF	1
C3044	430A8127	C,ELEC 50V 0.47UF	1
C3050	430A8126	C,ELEC 50V 0.33UF	1
C3051	421CB049	C,CERAMIC 50V 1000PF	1
C3052	430A8127	C,ELEC 50V 0.47UF	1
C3054	430A8110	C,ELEC 16V 22UF	1
C3056	430A8112	C,ELEC 16V 47UF	1
C3057	421CB049	C,CERAMIC 50V 1000PF	1
C3059	430A8128	C,ELEC 50V 1UF	1
C3065	430A8128	C,ELEC 50V 1UF	1
C3070	421CB862	C,CERAMIC 25V 0.01UF	1
C3071	423A2003	C,CERAMIC 50V 3PF	1
C3072	423A6039	C,CERAMIC 50V 56PF	1

MODEL : DECODER PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** ICS ***

IC3601	37001034	IC UPC1382C	1
IC3602	37001034	IC UPC1382C	1
IC3603	37101180	IC UPC358C	1
IC3604	37904017	MOS UPD4081	1
IC3605	37051378	MOS UPD4053BC (MPX)	1
IC3606	37901159	IC M5218 P (DIP)	1

*** TRANSISTORS ***

TR3601	355D1931	TR,2SC2785(E,F,H,J)AT	1
TR3602	355D1931	TR,2SC2785(E,F,H,J)AT	1
TR3603	35990812	TR,2SK163L	1
TR3604	355D1931	TR,2SC2785(E,F,H,J)AT	1
TR3606	355K2105	DTA144ES,AT	1
TR3607	355D2711	DTC144ES,AT	1
TR3608	355K2105	DTA144ES,AT	1
TR3609	355D1931	TR,2SC2785(E,F,H,J)AT	1
TR3610	355D1931	TR,2SC2785(E,F,H,J)AT	1
TR3611	355D1931	TR,2SC2785(E,F,H,J)AT	1
TR3612	355D1931	TR,2SC2785(E,F,H,J)AT	1

*** DIODES ***

D3601	360KA025	DIODE 1SS133	1
D3602	360KA025	DIODE 1SS133	1
D3603	360KA025	DIODE 1SS133	1
D3605	360KA025	DIODE 1SS133	1
D3606	360KA025	DIODE 1SS133	1
D3607	360KA025	DIODE 1SS133	1
D3608	360KA025	DIODE 1SS133	1
D3610	360KA025	DIODE 1SS133	1
D3611	360KA025	DIODE 1SS133	1
D3613	360KA025	DIODE 1SS133	1
ZD3601	369KE491	ZENER DIODE RD9.1JSB2AT26	1

*** VARIABLE RESISTORS ***

VR3601	41951204	R,VARIABLE 47K	1
VR3602	41951198	R,VARIABLE 4.7K	1
VR3603	41952308	VR 200H VR6CK-PH1S	1
VR3604	41952308	VR 200H VR6CK-PH1S	1

MODEL : DECODER PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** COILS & FILTERS ***

FL3601	61105021	SIF FILTER SFT 5.5MA	1
FL3602	61105022	SIF FILTER SFT 5.74MA	1
FL3603	611A2012	CERAMIC DISCRIMINATER	1
FL3604	611C7050	CERAMIC DISCRIMINATER	1
L3601	61091014	FILTER COIL 183	1
T3603	61804009	3.5FH DET COIL	1
T3604	61827060	LPF 15.75KHZ,31.5KHZ 7MM	1
T3605	61827060	LPF 15.75KHZ,31.5KHZ 7MM	1

*** RESISTORS ***

R3601	401KE665	R,CARBON 470H 5% 1/6W	1
R3602	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3604	401KE665	R,CARBON 470H 5% 1/6W	1
R3605	401KE691	R,CARBON 5.6K 5% 1/6W	1
R3606	401KE705	R,CARBON 22K 5% 1/6W	1
R3607	401KE705	R,CARBON 22K 5% 1/6W	1
R3608	401KE745	R,CARBON 1.0M 5% 1/6W	1
R3609	40913117	R,CARBON 4.7H 5% 1/4W	1
R3610	401KE665	R,CARBON 470H 5% 1/6W	1
R3611	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3613	401KE665	R,CARBON 470H 5% 1/6W	1
R3614	401KE691	R,CARBON 5.6K 5% 1/6W	1
R3615	401KE705	R,CARBON 22K 5% 1/6W	1
R3616	40913117	R,CARBON 4.7H 5% 1/4W	1
R3617	401KE649	R,CARBON 100H 5% 1/6W	1
R3618	401KE679	R,CARBON 1.8K 5% 1/6W	1
R3619	401KE671	R,CARBON 820H 5% 1/6W	1
R3620	401KE685	R,CARBON 3.3K 5% 1/6W	1
R3621	401KE729	R,CARBON 220K 5% 1/6W	1
R3622	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3623	401KE745	R,CARBON 1.0M 5% 1/6W	1
R3624	401KE691	R,CARBON 5.6K 5% 1/6W	1
R3625	40913117	R,CARBON 4.7H 5% 1/4W	1
R3626	401KE649	R,CARBON 100H 5% 1/6W	1
R3627	401KE721	R,CARBON 100K 5% 1/6W	1
R3628	401KE695	R,CARBON 8.2K 5% 1/6W	1
R3629	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3630	401KE693	R,CARBON 6.8K 5% 1/6W	1

MODEL : DECODER PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R3631	401KE717	R,CARBON 68K 5% 1/6W	1
R3632	401KE721	R,CARBON 100K 5% 1/6W	1
R3633	404CA649	R,METAL 100H 1% 1/6W	1
R3634	404CA744	R,METAL 910K 1% 1/6W	1
R3635	401KE721	R,CARBON 100K 5% 1/6W	1
R3636	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3637	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3638	401KE721	R,CARBON 100K 5% 1/6W	1
R3639	404CA651	R,METAL 120H 1% 1/6W	1
R3640	404CA745	R,METAL 1M 5% 1/6W	1
R3641	401KE721	R,CARBON 100K 5% 1/6W	1
R3642	40913117	R,CARBON 4.7H 5% 1/4W	1
R3643	401KE729	R,CARBON 220K 5% 1/6W	1
R3644	401KE729	R,CARBON 220K 5% 1/6W	1
R3645	40913165	R,CARBON 470H 5% 1/4W	1
R3646	401KE705	R,CARBON 22K 5% 1/6W	1
R3647	401KE705	R,CARBON 22K 5% 1/6W	1
R3649	401KE705	R,CARBON 22K 5% 1/6W	1
R3650	401KE705	R,CARBON 22K 5% 1/6W	1
R3652	401KE703	R,CARBON 18K 5% 1/6W	1
R3653	401KE721	R,CARBON 100K 5% 1/6W	1
R3654	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3655	401KE735	R,CARBON 390K 5% 1/6W	1
R3656	401KE735	R,CARBON 390K 5% 1/6W	1
R3657	401KE725	R,CARBON 150K 5% 1/6W	1
R3658	401KE709	R,CARBON 33K 5% 1/6W	1
R3659	401KE730	R,CARBON 240K 5% 1/6W	1
R3660	401KE709	R,CARBON 33K 5% 1/6W	1
R3661	401KE723	R,CARBON 120K 5% 1/6W	1
R3662	401KE730	R,CARBON 240K 5% 1/6W	1
R3663	401KE723	R,CARBON 120K 5% 1/6W	1
R3664	401KE721	R,CARBON 100K 5% 1/6W	1
R3665	401KE721	R,CARBON 100K 5% 1/6W	1
R3666	401KE721	R,CARBON 100K 5% 1/6W	1
R3667	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3668	401KE673	R,CARBON 1.0K 5% 1/6W	1
R3669	40913117	R,CARBON 4.7H 5% 1/4W	1
R3670	401KE705	R,CARBON 22K 5% 1/6W	1
R3671	401KE705	R,CARBON 22K 5% 1/6W	1

MODEL : DECODER PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R3672	401KE697	R,CARBON 10K 5% 1/6W	1
R3673	401KE697	R,CARBON 10K 5% 1/6W	1
R3674	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3675	401KE681	R,CARBON 2.2K 5% 1/6W	1
R3676	401KE705	R,CARBON 22K 5% 1/6W	1
R3677	401KE671	R,CARBON 820H 5% 1/6W	1
R3678	401KE684	R,CARBON 3.0K 5% 1/6W	1
R3679	401KE671	R,CARBON 820H 5% 1/6W	1
R3680	401KE684	R,CARBON 3.0K 5% 1/6W	1
R3681	401KE657	R,CARBON 220H 5% 1/6W	1
R3682	401KE657	R,CARBON 220H 5% 1/6W	1
R3683	401KE677	R,CARBON 1.5K 5% 1/6W	1
R3684	404CA657	R,METAL 220H 1% 1/6W	1
R3685	404CA657	R,METAL 220H 1% 1/6W	1

*** CAPACITORS ***

C3601	439J3060	C,ELEC 50V 1.0UF	1
C3602	421CB862	C,CERAMIC 25V 0.01UF	1
C3603	421CB862	C,CERAMIC 25V 0.01UF	1
C3604	439J3060	C,ELEC 50V 1.0UF	1
C3605	429G8264	C,METAL FILM 50V 0.012UF	1
C3606	439J3062	C,ELEC 50V 3.3UF	1
C3607	439J3025	C,ELEC 16V 22UF	1
C3608	430A8110	C,ELEC 16V 22UF	1
C3609	439J3027	C,ELEC 16V 47UF	1
C3610	421CB862	C,CERAMIC 25V 0.01UF	1
C3611	421CB862	C,CERAMIC 25V 0.01UF	1
C3612	421CB862	C,CERAMIC 25V 0.01UF	1
C3613	439J3060	C,ELEC 50V 1.0UF	1
C3614	429G8264	C,METAL FILM 50V 0.012UF	1
C3615	439J3062	C,ELEC 50V 3.3UF	1
C3616	430A8110	C,ELEC 16V 22UF	1
C3617	439J3025	C,ELEC 16V 22UF	1
C3618	439J3027	C,ELEC 16V 47UF	1
C3619	421CB862	C,CERAMIC 25V 0.01UF	1
C3620	421CB045	C,CERAMIC 50V 470PF	1
C3621	421CB862	C,CERAMIC 25V 0.01UF	1
C3622	421CB045	C,CERAMIC 50V 470PF	1
C3623	421CB045	C,CERAMIC 50V 470PF	1

MODEL : DECODER PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C3624	430A8109	C,ELEC 16V 10UF	1
C3627	430A8109	C,ELEC 16V 10UF	1
C3628	42978147	C,FILM 100V 0.047UF	1
C3629	42978147	C,FILM 100V 0.047UF	1
C3630	430A8128	C,ELEC 50V 1UF	1
C3631	430A8110	C,ELEC 16V 22UF	1
C3632	42978148	C,FILM 100V 0.1UF	1
C3633	42978148	C,FILM 100V 0.1UF	1
C3634	439J3060	C,ELEC 50V 1.0UF	1
C3635	430A8112	C,ELEC 16V 47UF	1
C3636	430A8109	C,ELEC 16V 10UF	1
C3637	430A8109	C,ELEC 16V 10UF	1
C3639	430A8110	C,ELEC 16V 22UF	1
C3640	439J3014	C,ELEC 10V 47UF	1
C3641	433A4161	C,ELEC 50V 1.0UF-5BSRA,AT	1
C3642	433A4161	C,ELEC 50V 1.0UF-5BSRA,AT	1
C3643	439J3060	C,ELEC 50V 1.0UF	1
C3644	439J3060	C,ELEC 50V 1.0UF	1
C3645	421CB209	C,CERAMIC 50V 4.7 PF	1
C3646	430A8112	C,ELEC 16V 47UF	1
C3647	439J3025	C,ELEC 16V 22UF	1
C3648	430A8110	C,ELEC 16V 22UF	1
C3651	429G8265	C,METAL FILM 50V 0.015UF	1
C3652	429G8265	C,METAL FILM 50V 0.015UF	1
C3653	439J3061	C,ELEC 50V 2.2UF	1
C3654	430A8129	C,ELEC 50V 2.2UF	1
C3655	421CB209	C,CERAMIC 50V 4.7 PF	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS ***			
IC5001	37101159	LA7016 ANALOG SW	1
IC5002	37101159	LA7016 ANALOG SW	1
IC5003	37151413	IC M51272FP	1
IC5004	37151414	IC M51279SP	1
IC5005	37101333	IC HA19508	1
IC5006	37101333	IC HA19508	1
IC5007	37101317	IC MB 40778	1
IC5008	37101318	IC MN 3106	1
IC5009	37151505	IC HA11544	1
IC5010	37101332	IC HA19216	1
IC5011	37151506	IC CXD1175 P/M DIP	1
IC5012	37151508	MOS SLA8F0SF-0C	1
IC5013	37101362	IC UPD41464V-12	1
IC5014	37101362	IC UPD41464V-12	1
IC5015	37101362	IC UPD41464V-12	1
IC5016	37101362	IC UPD41464V-12	1
IC5017	37101362	IC UPD41464V-12	1
IC5018	37101362	IC UPD41464V-12	1
IC5019	37101362	IC UPD41464V-12	1
IC5020	37101362	IC UPD41464V-12	1
IC5021	37101362	IC UPD41464V-12	1
IC5022	37101362	IC UPD41464V-12	1
IC5023	37101323	IC BA15218 (OP AMP)	1
IC5024	37101397	LVA-516(SYNC.SEP)	1
IC5025	37151414	IC M51279SP	1
IC5026	37101397	LVA-516(SYNC.SEP)	1
IC5027	37101159	LA7016 ANALOG SW	1
IC5028	37101159	LA7016 ANALOG SW	1
IC5029	37951156	IC MOS UPD74HC00C	1
IC5201	37951185	IC MOS UPD 74HC02C	1

*** TRANSISTORS ***

Q5001	356K0618	2SA1037K-R,AT	1
Q5007	356D0618	2SC2412K-R(0°)	1
Q5008	356D0618	2SC2412K-R(0°)	1
Q5009	356K0618	2SA1037K-R,AT	1
Q5010	356D0618	2SC2412K-R(0°)	1
Q5011	356D0618	2SC2412K-R(0°)	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q5013	356K0618	2SA1037K-R,AT	1
Q5014	356K0618	2SA1037K-R,AT	1
Q5015	356D0618	2SC2412K-R(0°)	1
Q5016	356K0618	2SA1037K-R,AT	1
Q5017	356K0618	2SA1037K-R,AT	1
Q5018	356D0618	2SC2412K-R(0°)	1
Q5019	356K0618	2SA1037K-R,AT	1
Q5020	356K0618	2SA1037K-R,AT	1
Q5021	35502111	TR,BN1L4M(A,47K)	1
Q5022	35542717	TR,BA1L4M(C,47K)	1
Q5024	355D2717	TR,BA1L4M	1
Q5025	355K2106	TR,DTA124ES,AT	1
Q5026	355K2105	DTA144ES,AT	1
Q5030	355D2710	DTC124ES,AT	1
Q5201	356D0618	2SC2412K-R(0°)	1
Q5202	356K0618	2SA1037K-R,AT	1
Q5203	356K0618	2SA1037K-R,AT	1
Q5204	356D0618	2SC2412K-R(0°)	1
Q5205	356K0618	2SA1037K-R,AT	1
Q5206	356K0618	2SA1037K-R,AT	1
Q5501	355K2111	TR,BN1L4M(A,47K)AT	1
Q5502	355D2717	TR,BA1L4M	1
Q5511	355K1131	TR,2SA1175 (E,F,H,J)	1
Q5512	355K1131	TR,2SA1175 (E,F,H,J)	1
Q5513	355D1931	TR,2SC2785(E,F,H,J)AT	1
*** DIODES ***			
D5002	360KC979	DIODE DAN202K-N,T2,AT	1
D5003	360KC979	DIODE DAN202K-N,T2,AT	1
D5004	360KC979	DIODE DAN202K-N,T2,AT	1
D5010	36001025	DIODE 1SS133	1
D5012	360KA025	DIODE 1SS133	1
D5013	360KA025	DIODE 1SS133	1
D5501	360KA025	DIODE 1SS133	1
ZD5001	369KE161	ZENER DIODE RD5.1EB2,AT26	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** VARIABLE RESISTORS ***			
VR5001	41951257	R,VARIABLE 47KB	1
VR5003	41951257	R,VARIABLE 47KB	1
VR5004	41951257	R,VARIABLE 47KB	1
VR5005	41951257	R,VARIABLE 47KB	1
VR5007	41951254	R,VARIABLE 10KB	1
VR5008	41951254	R,VARIABLE 10KB	1
VR5009	41951261	R,VARIABLE 220KB	1
VR5010	41951254	R,VARIABLE 10KB	1
VR5011	41951254	R,VARIABLE 10KB	1
*** COILS & FILTERS ***			
LF5001	61827081	LOW PASS FILTER	1
L5001	610G1623	FILTER COIL 33UH AT (S)	1
L5002	610G1623	FILTER COIL 33UH AT (S)	1
L5003	610G1623	FILTER COIL 33UH AT (S)	1
L5007	610G1623	FILTER COIL 33UH AT (S)	1
L5008	610G1625	FILTER COIL 47UH AT (S)	1
L5009	610G1629	FILTER COIL 100UH AT (S)	1
L5010	610G1623	FILTER COIL 33UH AT (S)	1
L5011	610G1522	FILTER COIL 27UH AT (S)	1
L5012	610G1522	FILTER COIL 27UH AT (S)	1
L5013	610G1518	FILTER COIL 12UH AT(S)	1
L5014	610G1517	FILTER COIL 10UH AT (S)	1
L5015	610G1623	FILTER COIL 33UH AT (S)	1
L5016	610G1623	FILTER COIL 33UH AT (S)	1
L5017	610G1623	FILTER COIL 33UH AT (S)	1
L5020	610G1623	FILTER COIL 33UH AT (S)	1
L5021	610G1623	FILTER COIL 33UH AT (S)	1
L5022	610G1623	FILTER COIL 33UH AT (S)	1
L5023	610G1517	FILTER COIL 10UH AT (S)	1
L5025	610G1623	FILTER COIL 33UH AT (S)	1
L5026	610G1511	FILTER COIL 3.3UH AT (S)	1
L5027	610G1517	FILTER COIL 10UH AT (S)	1
L5028	610G1523	FILTER COIL 33UH AT(S)	1
L5029	610G1523	FILTER COIL 33UH AT(S)	1
L5201	610G1623	FILTER COIL 33UH AT (S)	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** PWB ASSYS ***			
	81B26N01	SUB DIGITAL-2 PWB ASSY	1
	81B26Y01	SUB DIGITAL-1 PWB ASSY	1
*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***			
X5001	64004164	CRYSTAL (17.734MHZ)	1
X5002	64004164	CRYSTAL (17.734MHZ)	1
X5201	64004174	X'TAL 11.727MHZ	1
X5202	64004175	X'TAL 11.746MHZ	1
*** APPEARANCE PARTS ***			
	16286932	CABLE TIE T18R(WHITE)	1
	16875531	SCREW M3*8*15BF	4
*** RESISTORS ***			
C5111	404X8801	R,CHIP METAL 000H JOUMPER	1
C5113	404X8801	R,CHIP METAL 000H JOUMPER	1
C5203	404X8801	R,CHIP METAL 000H JOUMPER	1
C5206	404X8801	R,CHIP METAL 000H JOUMPER	1
R5001	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R5002	404X8731	R CHIP METAL 270K 5%1/16W	1
R5004	404X8675	R CHIP METAL 1.2K 5%1/16W	1
R5005	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5006	404X8719	R CHIP METAL 82K 5%1/16W	1
R5007	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R5008	404X8711	R CHIP METAL 39K 5%1/16W	1
R5009	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5010	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5011	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5012	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5013	404X8683	R CHIP METAL 2.7K 5%1/16W	1
R5014	404X8701	R CHIP METAL 15K 5%1/16W	1
R5015	404X8701	R CHIP METAL 15K 5%1/16W	1
R5016	404X8743	R CHIP METAL 820K 5%1/16W	1
R5017	404X8709	R CHIP METAL 33K 5%1/16W	1
R5018	404X8737	R CHIP METAL 470K 5%1/16W	1
R5019	404X8677	R CHIP METAL 1.5K 5%1/16W	1
R5020	404X8643	R CHIP METAL 56H 5%1/16W	1
R5021	404X8661	R CHIP METAL 330H 5%1/16W	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R5036	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5037	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5038	404X8721	R CHIP METAL 100K 5%1/16W	1
R5039	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5040	404X8653	R CHIP METAL 150H 5%1/16W	1
R5041	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R5042	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5043	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R5044	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5045	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R5046	404X8687	R CHIP METAL 3.9K 5%1/16W	1
R5047	404X8668	R CHIP METAL 620H 5%1/16W	1
R5048	404X8687	R CHIP METAL 3.9K 5%1/16W	1
R5049	404X8669	R CHIP METAL 680H 5%1/16W	1
R5052	409HB662	R,CARBON 360H 5% 1/4W	1
R5053	404X8659	R CHIP METAL 270H 5%1/16W	1
R5054	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5055	404X8697	R CHIP METAL 10K 5%1/16W	1
R5056	404X8697	R CHIP METAL 10K 5%1/16W	1
R5057	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5058	404X8633	R CHIP METAL 22H 5%1/16W	1
R5059	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5060	404X8633	R CHIP METAL 22H 5%1/16W	1
R5062	404X8705	R CHIP METAL 22K 5%1/16W	1
R5063	404X8713	R CHIP METAL 47K 5%1/16W	1
R5064	404X8709	R CHIP METAL 33K 5%1/16W	1
R5065	404X8681	R CHIP METAL 2.2K 5%1/16W	1
R5066	404X8725	R CHIP METAL 150K 5%1/16W	1
R5067	404X8725	R CHIP METAL 150K 5%1/16W	1
R5068	404X8703	R CHIP METAL 18K 5%1/16W	1
R5069	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5070	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5071	404X8663	R CHIP METAL 390H 5%1/16W	1
R5072	404X8801	R,CHIP METAL 000H JOUMPER	1
R5073	404X8801	R,CHIP METAL 000H JOUMPER	1
R5074	404X8801	R,CHIP METAL 000H JOUMPER	1
R5075	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5078	404X8657	R CHIP METAL 220H 5%1/16W	1
R5079	404X8673	R CHIP METAL 1.0H 5%1/16W	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R5080	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5081	404X8666	R CHIP METAL 510H 5%1/16W	1
R5082	404X8679	R CHIP METAL 1.8K 5%1/16W	1
R5083	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5084	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5085	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5086	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5087	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5088	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5089	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5091	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5093	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5094	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5095	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5096	404X8685	R CHIP METAL 3.3K 5%1/16W	1
R5097	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5098	404X8721	R CHIP METAL 100K 5%1/16W	1
R5099	404X8737	R CHIP METAL 470K 5%1/16W	1
R5100	404X8667	R CHIP METAL 560H 5%1/16W	1
R5101	404X8745	R CHIP METAL 1.0M 5%1/16W	1
R5102	404X8695	R CHIP METAL 8.2K 5%1/16W	1
R5103	404X8707	R CHIP METAL 27K 5%1/16W	1
R5104	404X8683	R CHIP METAL 2.7K 5%1/16W	1
R5105	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5106	404X8643	R CHIP METAL 56H 5%1/16W	1
R5107	404X8661	R CHIP METAL 330H 5%1/16W	1
R5108	404X8667	R CHIP METAL 560H 5%1/16W	1
R5109	404X8745	R CHIP METAL 1.0M 5%1/16W	1
R5110	404X8695	R CHIP METAL 8.2K 5%1/16W	1
R5111	404X8707	R CHIP METAL 27K 5%1/16W	1
R5112	404X8683	R CHIP METAL 2.7K 5%1/16W	1
R5113	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5114	404X8705	R CHIP METAL 22K 5%1/16W	1
R5115	404X8737	R CHIP METAL 470K 5%1/16W	1
R5116	404X8695	R CHIP METAL 8.2K 5%1/16W	1
R5117	404X8691	R CHIP METAL 5.6K 5%1/16W	1
R5118	404X8710	R CHIP METAL 36K 5%1/16W	1
R5119	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5120	404X8659	R CHIP METAL 270H 5%1/16W	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R5121	404X8705	R CHIP METAL 22K 5%1/16W	1
R5123	404X8665	R CHIP METAL 470H 5%1/16W	1
R5124	404X8649	R CHIP METAL 100H 5%1/16W	1
R5125	404X8649	R CHIP METAL 100H 5%1/16W	1
R5126	404X8801	R CHIP METAL 000H JOUMPER	1
R5127	404X8649	R CHIP METAL 100H 5%1/16W	1
R5128	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5129	404X8708	R CHIP METAL 30K 5%1/16W	1
R5130	404X8704	R CHIP METAL 20K 5%1/16W	1
R5132	404X8713	R CHIP METAL 47K 5%1/16W	1
R5133	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5134	404X8713	R CHIP METAL 47K 5%1/16W	1
R5135	404X8801	R CHIP METAL 000H JOUMPER	1
R5202	404X8729	R CHIP METAL 220K 5%1/16W	1
R5203	404X8721	R CHIP METAL 100K 5%1/16W	1
R5204	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5205	404X8729	R CHIP METAL 220K 5%1/16W	1
R5206	404X8721	R CHIP METAL 100K 5%1/16W	1
R5207	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5210	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5211	404X8697	R CHIP METAL 10K 5%1/16W	1
R5212	404X8697	R CHIP METAL 10K 5%1/16W	1
R5215	404X8655	R CHIP METAL 180H 5%1/16W	1
R5302	401KE691	R,CARBON 5.6K 5% 1/6W	1
R5303	401KE673	R,CARBON 1.0K 5% 1/6W	1
R5304	401KE727	R,CARBON 180K 5% 1/6W	1
R5305	401KE727	R,CARBON 180K 5% 1/6W	1
R5306	401KE697	R,CARBON 10K 5% 1/6W	1
R5307	401KE721	R,CARBON 100K 5% 1/6W	1
R5501	401KE689	R,CARBON 4.7K 5% 1/6W	1
R5502	401KE689	R,CARBON 4.7K 5% 1/6W	1
R5503	401KE689	R,CARBON 4.7K 5% 1/6W	1
R5504	401KE689	R,CARBON 4.7K 5% 1/6W	1
R5511	401KE697	R,CARBON 10K 5% 1/6W	1
R5512	401KE697	R,CARBON 10K 5% 1/6W	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** CAPACITORS ***

C5001	430A8112	C,ELEC 16V 47UF	1
C5002	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5003	430A8112	C,ELEC 16V 47UF	1
C5004	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5005	433A4126	C,ELEC 6.3V 22UF-5BSRA,AT	1
C5006	430A8101	C,ELEC 6.3V 22UF	1
C5007	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5008	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5009	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5010	430A8127	C,ELEC 50V 0.47UF	1
C5011	430A8128	C,ELEC 50V 1UF	1
C5012	430A8128	C,ELEC 50V 1UF	1
C5013	430A8127	C,ELEC 50V 0.47UF	1
C5014	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5018	423X2649	CC CHIP12 N00050V 100PF5%	1
C5019	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5021	430A8103	C,ELEC 6.3V 47UF	1
C5023	423X1655	CC CHIP12 50V 180PF5%	1
C5024	430A8128	C,ELEC 50V 1UF	1
C5025	430A8128	C,ELEC 50V 1UF	1
C5026	430A8127	C,ELEC 50V 0.47UF	1
C5027	430A8112	C,ELEC 16V 47UF	1
C5028	429C0333	C,CERAMIC 25V 0.047UF	1
C5029	429G6501	C,FILM 50V 1000PF 5%	1
C5030	423X1627	CC CHIP12 50V 12PF5%	1
C5031	423X1627	CC CHIP12 50V 12PF5%	1
C5032	423X1649	CC CHIP12 50V 100PF5%	1
C5033	423X1649	CC CHIP12 50V 100PF5%	1
C5034	423X1653	CC CHIP12 50V 150PF5%	1
C5035	429G6502	C,FILM 50V 1200PF 5%	1
C5036	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5037	430A8128	C,ELEC 50V 1UF	1
C5038	430A8103	C,ELEC 6.3V 47UF	1
C5039	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5040	430A8130	C,ELEC 50V 3.3UF	1
C5041	429G6519	C,FILM 50V 0.033UF 5%	1
C5042	423X1649	CC CHIP12 50V 100PF5%	1
C5043	423X2625	CC CHIP12 N00050V 10PF 5%	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

C5044	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5045	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5049	423X1673	CC CHIP12 50V1000PF5%	1
C5050	423X1673	CC CHIP12 50V1000PF5%	1
C5056	430A8112	C,ELEC 16V 47UF	1
C5057	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5058	430B9026	C,ELEC 16V 22UF	1
C5059	430B9029	C,ELEC 16V 100UF	1
C5060	429C0333	C,CERAMIC 25V 0.047UF	1
C5061	430B9026	C,ELEC 16V 22UF	1
C5062	430B9026	C,ELEC 16V 22UF	1
C5063	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5064	430B9003	C,ELEC 6.3V 100UF	1
C5065	430B9003	C,ELEC 6.3V 100UF	1
C5066	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5067	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5068	430B9003	C,ELEC 6.3V 100UF	1
C5069	429C0333	C,CERAMIC 25V 0.047UF	1
C5070	430A8104	C,ELEC 6.3V 100UF	1
C5071	429C0333	C,CERAMIC 25V 0.047UF	1
C5072	430A8101	C,ELEC 6.3V 22UF	1
C5073	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5074	430A8104	C,ELEC 6.3V 100UF	1
C5075	429C0333	C,CERAMIC 25V 0.047UF	1
C5076	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5077	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5078	430A8113	C,ELEC 16V 100UF	1
C5079	423X1641	CC CHIP12 50V 47PF5%	1
C5080	423X1649	CC CHIP12 50V 100PF5%	1
C5081	429G6921	C,METAL FILM 50V 0.47UF	1
C5082	429G6909	C,METAL FILM 50V 0.047UF	1
C5083	429C0337	C,CERAMIC 25V 0.1UF	1
C5084	429C0337	C,CERAMIC 25V 0.1UF	1
C5085	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5086	430B9003	C,ELEC 6.3V 100UF	1
C5087	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5088	430B9003	C,ELEC 6.3V 100UF	1
C5090	423X2647	CC CHIP12 N00050V 82PF 5%	1
C5092	430B9026	C,ELEC 16V 22UF	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C5093	429C0337	C,CERAMIC 25V 0.1UF	1
C5094	429C0337	C,CERAMIC 25V 0.1UF	1
C5095	430B9003	C,ELEC 6.3V 100UF	1
C5096	429C0333	C,CERAMIC 25V 0.047UF	1
C5097	430B9003	C,ELEC 6.3V 100UF	1
C5098	429C0333	C,CERAMIC 25V 0.047UF	1
C5099	43029032	C,ELEC 16V 470UF	1
C5100	429C0333	C,CERAMIC 25V 0.047UF	1
C5101	429C0333	C,CERAMIC 25V 0.047UF	1
C5102	430B9003	C,ELEC 6.3V 100UF	1
C5103	429C0333	C,CERAMIC 25V 0.047UF	1
C5104	423X1649	CC CHIP12 50V 100PF5%	1
C5105	423X1649	CC CHIP12 50V 100PF5%	1
C5106	423X1649	CC CHIP12 50V 100PF5%	1
C5107	423X1649	CC CHIP12 50V 100PF5%	1
C5108	423X1649	CC CHIP12 50V 100PF5%	1
C5109	423X1649	CC CHIP12 50V 100PF5%	1
C5110	423X1649	CC CHIP12 50V 100PF5%	1
C5112	423X1649	CC CHIP12 50V 100PF5%	1
C5114	423X1649	CC CHIP12 50V 100PF5%	1
C5115	423X8209	CC CHIP12 JB25V0.033UF20%	1
C5116	423X1649	CC CHIP12 50V 100PF5%	1
C5117	423X1649	CC CHIP12 50V 100PF5%	1
C5118	423X1649	CC CHIP12 50V 100PF5%	1
C5119	430B9003	C,ELEC 6.3V 100UF	1
C5120	429C0333	C,CERAMIC 25V 0.047UF	1
C5121	429C0333	C,CERAMIC 25V 0.047UF	1
C5122	429C0333	C,CERAMIC 25V 0.047UF	1
C5123	429C0333	C,CERAMIC 25V 0.047UF	1
C5124	429C0333	C,CERAMIC 25V 0.047UF	1
C5125	429C0333	C,CERAMIC 25V 0.047UF	1
C5126	429C0333	C,CERAMIC 25V 0.047UF	1
C5127	423X1667	CC CHIP12 50V 560PF5%	1
C5128	429C0337	C,CERAMIC 25V 0.1UF	1
C5129	430A8128	C,ELEC 50V 1UF	1
C5130	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5131	423X9685	CC CHIP12 JF50V3300PF 80%	1
C5132	423X2667	CC CHIP12 N00050V 560PF5%	1
C5133	430A8111	C,ELEC 16V 33UF	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C5136	423X1649	CC CHIP12 50V 100PF5%	1
C5137	423X2625	CC CHIP12 N00050V 10PF 5%	1
C5138	423X1667	CC CHIP12 50V 560PF5%	1
C5139	429G8255	C,METAL FILM 50V 2200PF	1
C5140	430A8128	C,ELEC 50V 1UF	1
C5141	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5142	423X9685	CC CHIP12 JF50V3300PF 80%	1
C5143	423X2667	CC CHIP12 N00050V 560PF5%	1
C5144	430A8111	C,ELEC 16V 33UF	1
C5145	429C0337	C,CERAMIC 25V 0.1UF	1
C5146	429C0337	C,CERAMIC 25V 0.1UF	1
C5147	429C0337	C,CERAMIC 25V 0.1UF	1
C5148	430A8103	C,ELEC 6.3V 47UF	1
C5149	429C0337	C,CERAMIC 25V 0.1UF	1
C5151	429C0333	C,CERAMIC 25V 0.047UF	1
C5152	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5153	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5154	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5155	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5156	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5157	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5158	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5159	430A8112	C,ELEC 16V 47UF	1
C5160	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5161	430A8112	C,ELEC 16V 47UF	1
C5162	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5163	430B9003	C,ELEC 6.3V 100UF	1
C5164	429C0333	C,CERAMIC 25V 0.047UF	1
C5201	429C0333	C,CERAMIC 25V 0.047UF	1
C5202	430A8112	C,ELEC 16V 47UF	1
C5204	423X1645	CC CHIP12 50V 68PF5%	1
C5205	423X1633	CC CHIP12 50V 22PF5%	1
C5207	423X1645	CC CHIP12 50V 68PF5%	1
C5208	423X1633	CC CHIP12 50V 22PF5%	1
C5210	423X1643	CC CHIP12 50V 56PF5%	1
C5211	423X8921	C,CERAMIC 50V 0.1UF	1
C5302	430A8103	C,ELEC 6.3V 47UF	1
C5306	421CB029	C,CERAMIC 50V 47 PF	1
C5307	421CB029	C,CERAMIC 50V 47 PF	1
C5308	423A2102	C,CERAMIC 50V 150PF	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C5309	421CB037	C,CERAMIC 50V 100PF	1
C5310	429G6517	C,FILM 50V 0.022UF 5%	1
C5312	421CB042	C,CERAMIC 50V 270PF	1
C5501	423A1057	C,CERAMIC 50V 330PF	1
C5511	430A8124	C,ELEC 50V 0.1UF	1

MODEL : EVER5V TR MK-2 ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS ***			
	37101375	IC UPC7805HAA (SELECT)	1

MODEL : JACK TERMINAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
MD0901	34354029	RF.MODULATOR B/G,36) AL3	1
Q1	35542709	Micro relay G5A-237P(12V)	1
D1	360KA025	DIODE 1SS133, AT26	1
R10	401KE646	RD1/6PTY75HJ, AT26	1
R6	401KE646	RD1/6PTY75HJ, AT26	1
R7	401KE646	RD1/6PTY75HJ, AT26	1
R9	401KE646	RD1/6PTY75HJ, AT26	1
C1	42311100	CC45SL1H391J,B	1
C11	42311100	CC45SL1H391J,B	1
C12	42311100	CC45SL1H391J,B	1
C13	42311100	CC45SL1H391J,B	1
C14	42311100	CC45SL1H391J,B	1
C2	42311100	CC45SL1H391J,B	1
C3	42311100	CC45SL1H391J,B	1
C11	430A8112	CE04C1C470-5BSRA,AT	1
L1	610G1829	FILTER COIL 0405-5 101K,AT	1
RL1	65910086	DIGITAL TRANSISTOR DTC114ES	1
FL1	69699005	DS310-55B271	1
FL2	69699005	DS310-55B271	1
FL3	69699005	DS310-55B271	1
FL4	69699005	DS310-55B271	1
FL5	69699005	DS310-55B271	1
FL6	69699005	DS310-55B271	1

MODEL : POWER/REG UNIT

SYMBOL	PARTS NO	DESCRIPTION	QTY
	18292501	WIRE CLAMPER NIFUKO 2104	1
TR008	350D7217	TR 2SC945-T Q	1
TR006	35170501	ZENER DIODE AA1A4M	1
TR003	35541931	2SC2785 (E, F, H, J)	1
TR004	35924117	TRANSISTOR 2SB941Q	1
D001	369KB107	DIODE 11E2A1 (AT26)	1
D002	369KB107	DIODE 11E2TA1 (AT26)	1
ZD003	369KE161	ZENER DIODE RD5. 1EB2, AT26	1
R020	409H2715	RD1/4PTY56KJ, AT (83)	1
R019	409H2737	RD1/4PTY47KJ, AT (94)	1
R014	40913173	RD1/4PTB1.0KJ,F	1
R103	40913177	RD1/4PTB1.5KJ, F	1
R017	40932070	RS1PB150HJ, D	1
R008	40952875	RN1/4LTB1.1KF, A	1
R015	40952885	RN1/4LTB3.3KF, A	1
R016	40952885	RN1/4LTB3.3KF, A	1
R009	40952887	RN1/4LTB3.9KF, A	1
R008	40952909	RN1/4LTB33KF, A	1
C011	42311045	CC45SL1H101J, B	1
C091	42980100	CFS93MPAC2E683MAUCE	1
C006	430A8028	CE04C1H2R2-3.5BSRA, AT	1
C004	430B6028	CE04W1C470M-BTS	1
C009	430B6028	CE04W1C470M-BTS	1
C012	430B6028	CE04W1C470M-BTS	1
C007	439A1026	CE04C1E470BS, AT (NXD)	1
L091	61062018	COIL, LINE FILTER	1
F001	66671005	FUSE MF51T250V2A-CB	1
F091	66671005	FUSE MF51T250V2A-CB	1
C005	43026048	CED4W1E332MAS	1
C008	43026048	CED4W1E332MAS	1
PC001	70804204	POWER CORD ASSY FTZ	1
IC002	79VA0003	IC M5237L UCZ0097ZZ	1
R012	79VA0013	1W0.47HK, S UEFD47BE	1
R007	79VA0016	1/4W220HJ, B (7.5) UEEB2218A	1
R007	79VA0023	CE04W2A101MA UGAJ101BU	1
C001	79VA0079	CE04W1C 472MA	1
TR005	79VA0080	TR AN1F4M	1
D003	79VA0083	DIODE 11E1	1
D004	79VA0083	DIODE 11E1	1
D005	79VA0083	DIODE 11E1	1
D006	79VA0083	DIODE 11E1	1
D007	79VA0083	DIODE 11E1	1
D008	79VA0083	DIODE 11E1	1
D009	79VA0083	DIODE 11E1	1
D010	79VA0083	DIODE 11E1	1
D011	79VA0083	DIODE 11E1	1
D012	79VA0083	DIODE 11E1	1
D013	79VA0083	DIODE 11E1	1
D014	79VA0083	DIODE 11E1	1
D015	79VA0083	DIODE 11E1	1
D016	79VA0083	DIODE 11E1	1
D017	79VA0083	DIODE 11E1	1
D018	79VA0083	DIODE 11E1	1
C010	79VA0094	CE04W1E471VB	1
C010	79VA0094	CE04W1E471VB	1
TR002	79VA0099	TRANSISTOR 2SD1985	1
IC001	79VA0100	IC PQ05R041	1
TR007	79VA0137	TRANSISTOR 2SD1565	1

MODEL : POWER/REG UNIT

SYMBOL	PARTS NO	DESCRIPTION	QTY
DS001	79VA0138	DIODE D3SBA40	1
C002	79VA0140	CE04W1J221MAS	1
PT00	79VA0147	TRANSFORMER 816035043	1
C015	79VA0148	CE04C1E221MA (105°)	1
R003	79VA0149	RD1/4PTYR27J	1
R004	79VA0149	RD1/4PTYR27J	1
R005	79VA0150	RD1/4PTYR30J	1
R006	79VA0150	RD1/4PTYR30J	1
R018	79VA0151	RC1LTB56HJ	1

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** PWB ASSYS ***			
	81A80Z01	DRUM J. S.A(FE-S-4H-HF)	1
	81B26C01	CHROMA CTRL PWB ASSY	1
	81B26N01	SUB DIGITAL-2 PWB ASSY	1
	81B26W01	SUB VIDEO PWB ASSY	1
	81B26Y01	SUB DIGITAL-1 PWB ASSY	1
	81B26Z01	SUB VIDEO 2 PWB ASSY	1
PA02	81B26B01	VIDEO PWB ASSY	1
PA04	81B26D01	SYSCON/SERVO PWB ASSY	1
PA05	81B26E01	TUNER/IF PWB ASSY	1
PA06	81B26F01	TIMER/FUNC PWB ASSY	1
PA07	81B26G01	DIGITAL PWB ASSY	1
PA08	81B26H01	AUDIO PWB ASSY	1
PA11	81B26K01	SUB FUNCTION PWB ASSY	1
PA12	81B26L01	PRE AMP PWB ASSY	1
PA17	81A95Q01	DECODER PWB ASSY	1
PA18	795B26R2	POWER/REG UNIT ASSY	1
PA19	81A80S01	FLYING ERASE PWB ASSY	1
PA24	81B26X01	H.P/VIDEO SW PWB ASSY	1

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

*** ELECTRICAL PARTS & MISCELLANE OUS PARTS ***

	70780001	CABLE,CONNECTOR(150MM)	1
	71128537	JACK TERMINAL DS6000G	1
	795B26R2	POWER/REG UNIT DS6000G	1
	79559054	IEC RF CABLE (1.2M)	1
	79799653	REMOTE CONT.UNIT TRB-60G	1
BZ1771	63099017	PIEZO BUZZER KBS-20B-6P	1
B056	79762072	MINIATURE MAGNET(MP-5)	1
FD2001	67930096	FIP16QM6(DX4000G)	1
JK2001	70905730	HEAD PHONE JACK 1406 (2)	1
JK2002	70905764	RCA 3P JACK (GOLD)	1
A110	71128539	JACK TERN NAL PWB ASSY	1
RM1101	39906128	RBLOCK100K*5 1.8MM 1/16W	1
RM1102	39901055	R BLOCK1.0K*6 1.8MM 1/16W	1
RM1103	39906131	RBLOCK100K*8 1.8MM 1/16W	1
U2001	79539009	IR RECIEVER SBX-1483-55	1
X1101	39080023	4.19MHZ RESONATOR	1
X1401	64004143	X'TAL 4.43MHZ (W/O-ADJ)	1
X1402	64004173	X'TAL 13.3MHZ (3FSC-PAL)	1
X1602	39080031	CERAMIC RESONATOR 3.34MHZ	1
X2001	39080023	4.19MHZ RESONATOR	1
X2002	64004151	X'TAL 32.768KHZ	1
X2003	64004139	50HZ OSCILLATOR LQT-50X-1	1
X3001	39080012	CERAMIC RESO. CSB500E5	1
X5001	64004164	CRYSTAL (17.734MHZ)	1
X5002	64004164	CRYSTAL (17.734MHZ)	1
X5201	64004174	X'TAL 11.727MHZ	1
X5202	64004175	X'TAL 11.746MHZ	1

*** APPEARANCE PARTS ***

	16178693	SAPORT BRACKET	1
	16189374	BOTTOM CHASSIS ASSY	1
	16189981	FOOT ASSY FRONT(R)	1
	16189991	FOOT ASSY FRONT(L)	1
	16286932	CABLE TIE T18R(WHITE)	10
	16289031	SUPPORT S	2
	16450671	CORD BAND(VK-2)	1
	16533142	ROTOR BUSH	1
	16875531	SCREW M3*8*15BF	4
	16876141	SCREW 2CPTS3*12*15BF	9

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
--------	----------	-------------	-----

A006	16877101	SCREW CPIMS*2.6*6*15BF	2
	16877501	S-CBBMS*3*8*3GF	2
	16878181	SCREW,STB 3*8 (RED)	2
	16878211	SPECIAL SCREW 3*8*15CF	9
	188E6191	A SCREW SPECIAL 3*8	4
	16481471	SLIDE KNOB	2
	188E6211	B SCREW SPECIAL	1
	19516371	WIRE CLAMPER-B	2
	82B26AH1	ROTARY DRUM S,A	1
	82788NF1	EVER5V TR MK-2 ASSY	1
A001	16189872	FRONT PANEL ASSY DS6000G	1
A008	16189951	DOOR ASSY	1
A002	16191571	TOP COVER ASSY DS6000G	1
A003	16586161	BOTTOM PLATE	1
A101	16186144	CASSETTE HOUSE ASSY	1
A102	16454681	CASSETTE DOOR DS6000G	1
A103	16573831	FRONT COVER SPRING	1
B522	16878381	SCREW PTP2.6*6*15BF	1
A108	16631221	FUSE COVER(3)	1
B080	16583791	M SWITCH STICK PLATE	1
B532	16876431	SCREW PTB 4*12*15BF	6
B533	16876431	SCREW PTB 4*12*15BF	6
B533	16878561	SCREW	4
B523	16879401	SCREW S M2*8*15BF	1
B534	188E6201	SPECIAL SCREW	9

*** PRINTED & PACKING MATERIALS ***

	16825382	POLYETHYLENE BAG 260*380	1
	16834821	ACCESSORY BOX(88)	1
	78820481	INSTRUCTION BOOK DS6000G	1
	79759164	PIN PLUG CORD (SILVER)	1
	79759236	S CABLE (CHROME)	1
K009	16835811	CUSHION(F)	1
K010	16834171	CUSHION(REAR)	1
K011	16830121	PACKAGE	1
K011	16831761	SHEET	1
K012	16836311	CARTON BOX DS6000G	1

*** MECHANICAL PARTS ***

	16286932	CABLE TIE T18R(WHITE)	1
	16452011	COLLAR (1ST)	1
B001	16185786	TEN.REG.ARM ASSY	1
B002	16185812	BAND BRAKE ASSY	1

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
B003	16185874	S SOFT BRAKE ASSY	1
B004	16185883	T SOFT BRAKE ASSY	1
B005	82756BF1	LOADING ARM (T)SASSY	1
B006	82756BG1	LOADING ARM (S)SASSY	1
B007	16185673	C BRAKE ASSY	1
B008	16185863	REV BRAKE ASSY	1
B009	16185731	T REEL PLATE ASSY	1
B010	16185721	S REEL PLATE ASSY	1
B011	16450291	BELT PULLEY (GB)	1
B012	16186222	EARTH PLATE ASS'Y	1
B012	16584341	EARTH PLATE	1
B013	16185773	T MAIN BRAKE ASSY	1
B014	16185763	S MAIN BRAKE ASSY	1
B015	16450351	ROADING CAM	1
B016	16185902	REVERSE ARM ASSY (FLUNGE)	1
B017	16185793	MODE ARM ASSY	1
B018	16287641	NUT	3
B019	16185612	RINK (M) ASSY	1
B020	16185641	ARM (TOP) ASSY	1
B021	16185752	CR REVER ASSY	1
B022	16450102	ROADING GEAR (S)	1
B023	16450092	ROADING GEAR (T)	1
B024	16456621	RUBBER BELT V	1
B025	16185951	SECTOR GEAR ASSY	1
B026	16450141	CR SLIDER	1
B027	16189471	SOL LEVER ASSY	1
B028	16444374	G.P CAP	1
B029	16535821	IP COLLAR	1
B030	16534231	FRANGE	2
B031	16534251	COLLER	1
B032	16538151	TAPER PIN A	1
B033	16585591	TEN REG. SPRING(S)	1
B034	16583491	JOINT SPLING	1
B035	16583333	A/C SPRING	1
B036	16584521	CR TORSION SPLING	1
B037	16583341	GUIDE PIN SPLING	1
B038	91490301	SIWA*3*15BF	1
B040	16631331	SLIT WASHER 4.1*8*0.5	1
B041	16585251	C BRK SPRING N	1
B043	16584891	IP FRANGE SPRING	1

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
B044	16583431	REVERSE ARM SPLING	1
B045	16626541	WASHER(3)	1
B046	16288001	POLY SLIDER	2
B046	16628731	SPACER	2
B047	16629412	SLIT WASHER	2
B049	16629382	SLIT WASHER	2
B050	16630591	SLIT WASHER	4
B052	16584851	EARTH SPRING(HOLDER)	1
B054	19516371	WIRE CLAMPER-B	1
B055	79502078	CAPSTAN MOTER	1
B057	82B26AA1	HEAD DRUM S,A(S-P-4HF-FE)	1
B058	16185424	S SLANT BASE ASSY	1
B501	91012361	SCREW,CPIMS2.6*10*15BF(S)	3
B059	16185433	T SLANT BASE ASSY	1
B060	16190362	A/C HEAD ASSY (AL)	1
B061	16629401	SLIT WASHER	1
B065	16628791	WASHER	1
B066	16185853	PINCH ROLLER FULL ASSY	1
B502	910E3031	SCREW,PL-CPIMS*3*6*15BF(S)	4
B068	16288721	POLYSLIDER 2.1*7*0.5	1
B069	16185975	MAIN CAM ASSY	1
B070	82756PB1	FE ARM SASSY	1
B071	16188741	IP ROLLER ASSY	1
B072	79501159	FE HEAD	1
B079	16586131	MM BASE	1
B073	16186441	LED HOLDER ASSY(LEA-3)	1
B075	16185443	ROADING ARM (S) ASSY	1
B076	16185662	ROADING ARM (T) ASSY	1
B077	16583352	ROADING SPRING	1
B082	16536691	IP FLANGE(2)	1
B085	82A99KB1	MINI MAG SASSY	1
B083	16450451	FE ARM	1
B084	16185484	SUB CHASSIS FULL ASSY	1
B086	82756KY1	M,SWITCH SASSY	1
B089	16583453	IP SPLING	1
B090	16584362	C MOTOR CATCH PLATE	1
B521	91112001	SCREW CBIMS 2*3*15BF	2
B094	16187173	HL LINK FULL ASSY	1
B099	16536121	ACE ADJUST BUSH (M3)	1
B104	16188252	S SW ASSY	1
B106	82A21PC1	S SW SASSY	1
B107	73200033	CONNECTER TBG-P08X-A1	1
B105	16585361	SW PLATE(N)	1
B108	82A21PJ1	JUNCTION PWB SASSY (S)	1
B109	38200240	PHOTO INT.RUPT GP2S09 B,C	1

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
B511	16878771	SCREW M3*8*3KF (P8)	4
B516	16878391	SCREW WS M3*12*15BF 5.5	3
B517	16876781	SCREW,WS M2.6*6*15BF	5
B528	91012031	SCREW,CPIMS*2*6*15BF	1
B518	16878461	SCREW M3*8*15BF 6	5
B519	16876371	SCREW PTB 3*8*15BF	3
B520	16876321	SCREW, S M3X4X15BF	5
B527	16878771	SCREW M3*8*3KF (P8)	1
B540	16877731	SPCIAL SCREW	1

MODEL : CASSETTE HOUSING ASSY

SYMBOL	PARTS NO	DESCRIPTION
A301	16441731	LOADING BELT
A302	35290301	PHOTO TR PT361
A303	65330045	TACT SWITCH
A304	79502029	DC MICRO MOTOR RF-280R-10350
A305	67012026	CASSETTE HOUSE LAMP
A306	16582271	MIRROR
B070	65907089	REC SAFETY SW

REPLACEMENT PARTS LIST

- Lists up the parts exclusively used in the Model DS6000G(2).
- Please refer to the Service Manual of DS6000G for the other parts.

MODEL : DS6000G(2) PARTS LIST

SYMBOL	PARTS NO	DESCRIPTION	QTY
B088	82A30NF1	EVER 5V TR ASSY (105°C)	1
B057	82B95AH1	ROTARY DRUM S.A (S-P-4HF-FE)	1
B058	82B95AA1	HEAD DRUM S.A (S-P-4HF-FE)	1
C001	16192111	S SLANT BASE ASSY (GB)	1
C002	423X9705	CC CHIP12 JF1H 223Z.XV	1
C004	430A8318	CE04C1C100-5BSRE, AT	1
C005	430A8311	CE04C1A220-5BSRE, AT	1
C006	430A8307	CE04C0J101-5BSRE, AT	1
C007	430A8307	CE04C0J101-5BSRE, AT	1
C008	430A8318	CE04C1C100-5BSRE, AT	1
C009	423X9697	CC CHIP12 JF1H 103Z.XV	1
C010	423X9705	CC CHIP12 JF1H 223Z.XV	1
C011	423X9705	CC CHIP12 JF1H 223Z.XV	1
C012	423X9697	CC CHIP12 JF1H 103Z.XV	1
C013	423X9705	CC CHIP12 JF1H 223Z.XV	1
C014	423X9697	CC CHIP12 JF1H 103Z.XV	1
C015	423X9705	CC CHIP12 JF1H 223Z.XV	1
C016	423X9697	CC CHIP12 JF1H 103Z.XV	1
C017	423X2629	CC CHIP12 CH1H 150 J,XV	1
C018	423X9697	CC CHIP12 JF1H 103Z.XV	1
C019	423X2629	CC CHIP12 CH1H 150 J,XV	1
C020	423X9697	CC CHIP12 JF1H 103Z.XV	1
C021	423X9705	CC CHIP12 JF1H 223Z.XV	1
C022	423X9705	CC CHIP12 JF1H 223Z.XV	1
C023	430A8318	CE04C1C100-5BSRE, AT	1
C024	423X9705	CC CHIP12 JF1H 223Z.XV	1
C025	423X9221	CC CHIP12 JF1E 104Z,XV	1
C026	423X9221	CC CHIP12 JF1E 104Z,XV	1
C027	423X9221	CC CHIP12 JF1E 104Z,XV	1
C028	423X9697	CC CHIP12 JF1H 103Z.XV	1
C029	423X9697	CC CHIP12 JF1H 103Z.XV	1
C030	423X2629	CC CHIP12 CH1H 150 J,XV	1
C031	423X9697	CC CHIP12 JF1H 103Z.XV	1
C032	423X9697	CC CHIP12 JF1H 103Z.XV	1
C033	423X9697	CC CHIP12 JF1H 103Z.XV	1
C034	423X9697	CC CHIP12 JF1H 103Z.XV	1
C035	423X9705	CC CHIP12 JF1H 223Z.XV	1
C036	423X9221	CC CHIP12 JF1E 104Z,XV	1
C037	430A8325	CE04C1E3R3-5BSRE, AT	1
C038	423X9697	CC CHIP12 JF1H 103Z.XV	1
C039	423X9228	CC CHIP JF1E 224Z,XV	1
C040	430A8325	CE04C1E3R3-5BSRE, AT	1
C041	423X9705	CC CHIP12 JF1H 223Z.XV	1
C042	430A8318	CE04C1C100-5BSRE, AT	1
C043	430A8325	CE04C1E3R3-5BSRE, AT	1
C044	423X9705	CC CHIP12 JF1H 223Z.XV	1
C045	430A8325	CE04C1E3R3-5BSRE, AT	1
C046	423X9697	CC CHIP12 JF1H 103Z.XV	1
C047	423X9228	CC CHIP JF1E 224Z,XV	1
C048	430A8325	CE04C1E3R3-5BSRE, AT	1
C049	423X9705	CC CHIP12 JF1H 223Z.XV	1
C050	430A8318	CE04C1C100-5BSRE, AT	1
C051	430A8325	CE04C1E3R3-5BSRE, AT	1
C052	423X9705	CC CHIP12 JF1H 223Z.XV	1
C053	430A8318	CE04C1C100-5BSRE, AT	1
C054	423X9221	CC CHIP12 JF1E 104Z,XV	1
C055	430A8325	CE04C1E3R3-5BSRE, AT	1

MODEL : DS6000G(2) PARTS LIST

SYMBOL	PARTS NO	DESCRIPTION	QTY
C056	423X9697	CC CHIP12 JF1H 103Z.XV	1
C057	423X9228	CC CHIP JF1E 224Z,XV	1
C058	430A8325	CE04C1E3R3-5BSRE, AT	1
C059	430A8318	CE04C1C100-5BSRE, AT	1
C060	423X9705	CC CHIP12 JF1H 223Z.XV	1
C061	423X9221	CC CHIP12 JF1E 104Z,XV	1
C062	430A8325	CE04C1E3R3-5BSRE, AT	1
C063	423X9705	CC CHIP12 JF1H 223Z.XV	1
C064	430A8325	CE04C1E3R3-5BSRE, AT	1
C065	423X9697	CC CHIP12 JF1H 103Z.XV	1
C066	423X9228	CC CHIP JF1E 224Z,XV	1
C067	430A8325	CE04C1E3R3-5BSRE, AT	1
C068	423X9697	CC CHIP12 JF1H 103Z.XV	1
C069	423X9705	CC CHIP12 JF1H 223Z.XV	1
C070	430A8318	CE04C1C100-5BSRE, AT	1
C071	430A8325	CE04C1E3R3-5BSRE, AT	1
C072	423X9705	CC CHIP12 JF1H 223Z.XV	1
C073	430A8318	CE04C1C100-5BSRE, AT	1
C074	423X9705	CC CHIP12 JF1H 223Z.XV	1
C075	423X2641	CC CHIP12 CH1H 470 J,XV	1
C076	423X2633	CC CHIP12 CH1H 220 J,XV	1
C078	423X9221	CC CHIP12 JF1E 104Z,XV	1
C080	423X9697	CC CHIP12 JF1H 103Z.XV	1
C081	423X2629	CC CHIP12 CH1H 150 J,XV	1
C1301	404X8653	RM1/16SCHIP 150HJ,XV	1
C1449	404X8801	RM1/16SCHIP 000H J,XV	1
C1473	423X2649	CC CHIP12 CH1H 101 J,XV	1
C1508	43018105	CE04C1A220-5BSRA	1
C1542	421CB037	CK05B 1H101J, AT26 (3.5)	1
C1542	430A8109	CE04C1C100-5BSRA, AT	1
C1543	421CB862	CK05F 1E1032, AT26 (3.5)	1
C1544	421CB862	CK05F 1E1032, AT26 (3.5)	1
C1545	421CB862	CK05F 1E1032, AT26 (3.5)	1
C1407	360KA025	DIODE 1SS133, AT26	1
C1408	360KA025	DIODE 1SS133, AT26	1
C1409	360KA025	DIODE 1SS133, AT26	1
FL001	61828040	350NS DELAY LINE (FC=6MHZ)	1
FL002	61828039	4.43MHZ B.P.F. (COMB)	1
FL003	61828039	4.43MHZ B.P.F. (COMB)	1
FL004	61828039	4.43MHZ B.P.F. (COMB)	1
FL005	71905020	JUMPER LINE PFW-01-10	1
FL007	61828041	170ns DELAY LINE (FC=6MHZ)	1
FL009	61828041	170ns DELAY LINE (FC=6MHZ)	1
FL010	61828044	EMI FILTER 223	1
FL011	61828044	EMI FILTER 223	1
FL012	61828044	EMI FILTER 223	1
FL013	61828044	EMI FILTER 223	1
FL1408	61828043	300ns DELAY LINE (4.43)	1
FL1409	61828042	4.43MHZ B.P.F.	1
IC001	37101449	IC M51386L COMB DISPOTION	1
IC001	37151496	MOS M34201-110 PLCD REM2	1
IC002	37101468	IC CX22013 (LOGI COMB)	1
IC003	37101448	IC NJM78M09FA	1
IC004	37101467	IC CXL1009P (CCD)	1
IC005	37101467	IC CXL1009P (CCD)	1
IC006	37101467	IC CXL1009P (CCD)	1
IC007	37101467	IC CXL1009P (CCD)	1
IC1418	37101159	LA7016 ANALOG SW	1

DS6000G(2) SERVICE MANUAL

"Use this MANUAL together with DS6000G manual"

As for the DS6000G(2) only changed parts are described, since this model is basically the same as the DS6000G.

NO.	DS6000G		DS6000G(2)
	Contents	page	changed Parts
1.	PRECAUTIONS AND INSTRUCTIONS MANUAL	1-1	←
2.	DISASSEMBLY	2-1	←
3.	ADJUSTMENT	3-1	←
4.	BLOCK AND SCHEMATIC DIAGRAM		
	2-7. VIDEO SCHEMATIC DIAGRAM VIDEO-Y	4-15	NEW
	VIDEO SCHEMATIC DIAGRAM VIDEO-C	4-17	NEW
	PAL 3LINE COMB FILTER		NEW
5.	EXPLODED VIEW	5-1	←
6.	REPLACEMENT PARTS LIST	6-1	←
	(lists up the parts exclusively used in the Model DS6000G(2).)		
	NOTE:		
	This shows the special parts used for DS6000G(2) only. Please refer to the Service Manual of DS6000G for the other parts.		